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STUDENT PERCEPTIONS OF TEACHER COMMENTS:
RELATIONSHIPS BETWEEN SPECIFIC ASPECTS OF TEACHER COMMENTS
AND WRITING APPREHENSION

by

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A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements

for the degree of
Doctor of Philosophy

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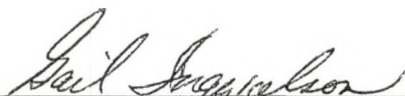
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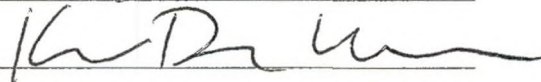
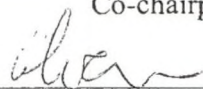
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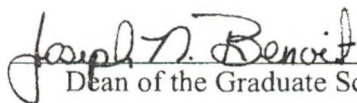
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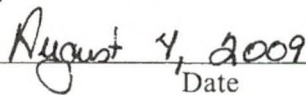
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so his children could aspire to something better;

and

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who never finished high school,
but earned an associate degree in her mid-fifties.

They would have been so proud.

ABSTRACT

Writing apprehension continues to be a barrier to effective student writing, and has been found to have an impact on choices of course, major, and even career. Yet the causes of writing apprehension have not been fully investigated. This study examined the relationship of comment placement, appearance, tone, and completeness to student writing apprehension levels, and to student perceptions of comment tones, which could also affect writing apprehension.

An original survey instrument was designed and tested for use in this study. It was administered to freshmen enrolled in first-semester English composition classes, as well as to seniors preparing to graduate at a small upper Midwestern university. Writing apprehension was measured using Daly and Miller's 1975 Writing Apprehension Scale. The data collected from 121 freshmen and 79 seniors was tested for correlations between aspects of instructor comments, and students' writing apprehension levels.

The results of those statistical analyses seemed to indicate that some specific aspects of instructor comments could be related to student perceptions of the tone of those comments. Of the aspects of instructor comments that were considered, only comment tone had a direct relationship with writing apprehension scores, but a number of other aspects of teacher comments, including placement, color, and completeness, were found to be related to student perceptions of tone, and thus indirectly related to writing apprehension levels.

CHAPTER I

INTRODUCTION

One of the most frequent complaints college teachers hear from those who hire their graduates is that the graduates cannot write well enough to function in the workplace. It is generally assumed that adequate skill in written communication is required for success in any profession (Bline, Low, Meixner, & Nouri, 2003). This is not a problem exclusive to the workplace, but one that is found throughout society. Employers have reported that both high school and college graduates are lacking in basic reading and writing skills (Kafer, 2006). Research (Casner-Lotto, 2006) found high school graduates to be deficient in basic English and writing skills, as well as in written communication skills. College graduates were deemed deficient in writing and written communication, though better prepared for the workplace than high school graduates. Henricks (2007) reported that when college graduate employees were given a test to determine whether they could re-write technical material into a language understandable to the public, most of them failed.

Since many accrediting agencies, such as the Commission on Colleges of the Southern Association of Colleges and Schools (Morello, 2000), require institutions of higher education to demonstrate that their graduates are proficient in exactly the *writing and communication* skills in which researchers (Casner-Lotto, 2006; Henricks, 2007) found them to be deficient, clearly a disconnect exists. Although college instructors may

have taught the necessary skills, and students may have been able to pass the required tests and courses, some students remained unable to write clearly and coherently. Teachers and instructors at all levels hope to improve the writing skills of their students, but in using traditional grading methods and commenting techniques, teachers may be developing and/or reinforcing a fear of writing that carries forward even into adulthood (Anson, 2000). Therefore, what teachers in public schools, colleges, and universities hope to do is not always what they actually accomplish.

Often, the lack of writing skill among college graduates is blamed on poor teaching, inadequate curricular requirements, a lack of stringent grading and evaluation, or simple failure on the part of schools and instructors to teach the basic grammar and punctuation skills that employers remember learning in their own school years. While it may be true that teaching techniques and content have changed over the years, a far greater cause of student inability to write clearly may be writing apprehension (Daly, 1978; Daly & Miller, 1975c). Is it possible to determine what causes the apprehension that may block students from writing effectively? Do students perceive instructor comments differently based on specific aspects of those comments? Do teacher and instructor comments have an impact on student writing apprehension? If so, what types of comments have the most impact?

Since the 1970s, student writing apprehension has been recognized as having a major impact on the writing success of students. Daly and Miller (1975a) were the first to identify the phenomenon known as writing apprehension when they speculated that it could be separated from the more broadly defined communication apprehension Daly had previously studied. Daly and Miller devised a twenty-six item instrument that, using a

likert-type scale, could rate the degree of writing apprehension of the respondents based on the attitudes they reported. Further testing led to their conclusion that writing apprehension was a strong factor in the ability of students and adults to write well. Daly and Miller's work continues to form the basis for all research associated with writing apprehension, even though it was conducted over thirty years ago. While research about writing apprehension continued into the eighties, most of what was completed after that time focused on writing apprehension in specific contexts, such as on-line writing (Mabrito, 2000) social work (Rompf, 1996), and accounting (Faris, Golen, & Lynch, 1999).

After continued research, Daly and Miller (1975b) noted a slight inverse correlation between writing apprehension and self-reported SAT-Verbal test scores, indicating that writing apprehension may have an impact on those test results. The correlation, while not strong, was statistically significant, a fact which indicated that writing apprehension was an important factor in student success on the SAT and in college. However, the correlation between writing apprehension and self reports of success in writing was found to be strong, in addition to being statistically significant.

Levels of writing anxiety vary, ranging from very high (almost paralyzing in intensity) to very low. In the lower ranges, apprehension can be a positive influence, leading students to put more effort into their writing, and triggering the formulation of ideas and subsequent successful writing. Apprehension may be a problem only when it becomes all-encompassing and enervating. Both lower levels of anxiety and the higher, and thus inhibiting, levels may originate from outside concerns such as fear of making errors and fear of evaluation. Daly and Miller (1975b) believed that writing apprehension

was a learned response caused in part by negative evaluation of earlier writing, which led students to fear writing itself. It has been widely assumed that years of critical teacher comments have been the primary cause of writing apprehension (Daly & Miller, 1975b), but little if any research has been done specifically to determine what impact different types of teacher comments have on writing apprehension levels, or even if teacher comments in general are actually the primary causative factor.

Further study by Daly and Miller (1975c) found a correlation between writing apprehension and message intensity, measured by administering both the Writing Apprehension Scale (WAS) and a fill-in-the-blank message in which the participants' word choices could be rated for intensity. After applying appropriate statistical tests, Daly and Miller determined that those who had been found to be highly apprehensive about writing tended to choose significantly less intense words on the second test.

In examining the issue of writing apprehension and the ways in which classroom practices might affect apprehension levels, it can be valuable to see what the country's most successful writing teachers emphasize in their own work. Those teachers could be identified in several ways. First, they would include middle school, high school, and college teachers who have had one to twenty years of teaching experience, representing various disciplines. Next, these teachers would be those who have published research in teaching writing, or taken part in research published by others (Anderson & Speck, 1997). In particular, the written responses highly successful teachers make to student writing could be examined, in order to explore the question of what kind of written comments lead to positive change in student apprehension, and therefore in writing.

Bardine (1999) explored the response of students to various types of instructor comments, investigating primarily the tone of comments, and finding evidence that students did indeed respond differently to various types of comments. That being the case, could teacher comments have an effect, positive or negative, upon student apprehension?

For many teachers, grading papers and finding methods of responding to student writing in ways that are helpful are the most stressful aspects of the profession, and many teachers report that after they return papers, they have lingering doubts about whether they are reaching their students. The frustration teachers feel increases when they realize that nearly 90% of high school students admitted that they did not really read or think about written comments they received (Bardine, Bardine, & Deegan, 2000). Worse yet, many teachers (Klose, 1999) report finding essays in the wastebasket, deposited there as students left the classroom, without having taken the time to consider how the instructor's comments might be of help to them.

Some students also report feeling powerless in the writing classroom, and unable to fulfill the teacher's expectations (Bardine, Bardine, & Deegan, 2000). While instructor feedback is recognized as an important part of teaching and learning, many students complain that they do not understand the comments written on their papers, because they are written in terminology to which teachers, but not students, are accustomed (Orrell, 2006). Occasionally, students did not read the comments their teachers made on papers, and those who did read them would sometimes request a conference in order to ask for further explanation, which made the written comments seem redundant (Monroe, 2002).

How do teachers respond to student writing? Is there any pattern in teacher responses that could have a specific and significant effect on student writing apprehension? Research (Bardine, Bardine, & Deegan, 2000) showed that both high school and college teachers most often respond negatively to their students' writing. Could that tendency, in itself, be a factor in increasing student writing apprehension? Is it possible that students respond to corrections by becoming more apprehensive than before the corrections were pointed out? If this is the case, how can this adverse reaction be changed? What other aspects of teacher comments might make those comments a positive factor in the students' minds?

Aside from having students pay attention to their comments, teachers hope to find ways for students to actually benefit from those written words and phrases. Teachers, in their efforts to find those techniques that will be most beneficial, often turn to anything they think might help. At all levels, teachers have reported experimenting with style of comment, order of comments (good news first), placement of comments (in the margins, at the end, or on a separate piece of paper), active listening techniques, specific instruction, broad instruction, and even different writing implements ranging from pencils to pens of different colors, and typescript (Monroe, 2002). Opinions about which aspects of teacher comments affect students negatively and which aspects work positively vary widely.

When teachers look to the research for help in learning how to make effective comments, however, they find only minimal guidance, such as, "don't forget to include some positive comments," "don't make too many corrections, to avoid discouraging and overwhelming students," and "write comments that will help the students with revision,

and not just help you to justify the grade you give” (Monroe, 2002). While these comments may be helpful, they are simply not enough to guide teachers in using written comments in the most effective way.

Not only high school students, but also college students are subject to writing apprehension, and high levels may impact their ability to learn to write clearly and effectively. Although some people may feel that college is too late for any attempt at improving writing apprehension, that may not be the case. College freshmen, still under the influence of their high school teachers, might benefit from teacher commenting techniques designed to reduce, rather than increase, writing apprehension. Furthermore, the impact of teacher comments might be seen on college seniors, who have successfully navigated the shoals of college paper writing.

Themes in Writing Apprehension Research

Any examination of literature about writing apprehension yields a number of themes. First, as Daly and Miller (1975a) demonstrated, writing apprehension is a widespread phenomenon, present in various degrees of severity. At its most severe, writing apprehension has had an impact on academic success, and among college students it influences student choices about which courses to take, and even which majors to pursue (Daly & Miller, 1975b; Faris, Golen, & Lynch, 1999; Wiltse, 2006). Writing apprehension influenced students at all levels, extending even into graduate school, where students with high writing apprehension wrote papers and proposals that were shallow and undeveloped compared to papers written by non-apprehensive students. In addition, Onwuegbuzie and Collins (2001) found that almost 95% of graduate students admitted that they procrastinated on academic tasks like writing, and 41.7% admitted to

putting off writing term papers, specifically. Onwuegbuzie et al. felt that this procrastination was caused by high levels of writing apprehension, and found a statistically significant correlation between the two. This impact also continues beyond the educational arena though. Not only are career choices made based on the fear of writing that Daly and Miller (1975a) identified as writing apprehension, but when people who have chosen careers in which they anticipate little writing find that they are expected to write, their struggle with writing apprehension leads to poor quality writing (Faris, Golen, & Lynch, 1999).

If writing apprehension is this important, then exploring its causative factors becomes a valid issue. It is no longer enough to simply accept the fact that some students are more apprehensive about writing than others. Little has been written, however, about causes of writing apprehension. In fact, since it was first identified in 1975, researchers (Daly & Miller, 1975b) have ascribed its existence to years of negative instructor comments. For more than thirty years, this attitude has been widely accepted.

Recent trends about pen color affecting students' self-esteem, or being perceived as hostile based merely on the color, could also tie into this pattern, linking self-esteem with writing apprehension. If there really is a link between specific aspects of instructor comments and self-concept, comment tone, and writing apprehension, the question of exactly how these issues are linked can also become important (Newcomb, 1998; Paver, 2005).

Research into ways to reduce writing apprehension is also sparse. Matthews (2006) found that some specific classroom practices helped to reduce writing apprehension levels, but she did not examine teacher comments specifically. However,

the fact that she found improvement in student writing apprehension levels after using specific classroom teaching techniques offers hope that changes in teacher commenting techniques might also have an impact. Those changes might be as simple as the use of specific colors of writing implements, placement of comments on students' papers, comment tone, and even the use of symbols and abbreviations, as opposed to more complete forms of comment.

Theoretical Framework

There is no dearth of research about teacher comments. The small number of empirical studies available are supplemented by qualitative research into the subject. In addition, a substantial body of writing is more general in nature, often consisting of anecdotal evidence rather than either in-depth qualitative or empirical research. Those writings often recommend such things as making positive comments, not making so many comments that students are overwhelmed (Monroe, 2002), and making comments as clear as possible (Fife & O'Neil, 2001).

Teachers spend a disproportionate amount of time grading and commenting on papers (Wiltse, 2002). Despite their best efforts, however, students (Bardine, 1999) reported that they viewed written comments mostly as clues on ways to get a better grade. Bardine, Bardine, and Deegan (2000) conducted a qualitative study to find out what types of comments students liked. In the process, they divided teacher comments into several categories, and examined student attitudes about each category. Other research (Ferris, 1997) has focused on length, tone, use of hedges, type of comments (Bardine, 1999), placement of comments (Ferris, 1997; Fife & O'Neil, 2001), and on the relative ease of on-line as opposed to hand-written commenting (Monroe, 2002; Monroe, 2003). Clearly,

instructor and teacher comments are important tools in teaching students to write.

Perhaps the overall importance of those comments is the reason that writing apprehension has been so widely believed to be caused by negative teacher comments, and although the impact is suspected only after years of such negative comments, each teacher who contributes bears a part of the responsibility, regardless of his or her intentions.

If instructor comments are held to be responsible for the existence of writing apprehension, and if writing apprehension has become a serious problem for many students and workers, then exploring the impact that specific aspects of teacher comments could have might be important and valuable. Effective teaching requires finding techniques to help students do their best work (Matthews, 2006). If writing apprehension, however, interferes with that, then it also interferes with the instructor's goals.

Too often, advice on grading papers and making comments is used only to change a narrow aspect of the comments themselves, without addressing the overall impact of the comments upon the students. The result is that comments continue to have the same impact they have had for many years, and writing apprehension continues to be a problem (Fife & O'Neil, 2001; Wiltse, 2002). Whether the writing apprehension is caused by repeated negative teacher comments, or whether the poor writing that is common among those with high writing apprehension levels leads to negative comments from instructors is not certain (Daly & Miller, 1975 b; Wiltse, 2002). What is certain is that the effective utilization of teacher comments, in areas ranging from comment placement, appearance, and tone, to completeness, could change the writing classroom, and affect student writing apprehension levels. With a clear understanding of the nature

and consequences of writing apprehension, it seems clear that research into possible causes could be valuable. Furthermore, exploration of teacher comments, which has in general focused on the teacher's point of view, has not clearly identified the impact teacher comments have on students, beyond compliance with specific types of instructions and requests in the course of re-writing and revising papers (Bardine, 1999; Bardine, Bardine, & Deegan, 2000).

If it could be shown, through impartial, quantitative research, that specific aspects of teacher comments have an impact, whether positive or negative, on student writing apprehension, the resulting impact on the teaching of writing, in every field, and the subsequent impact on student writing, academic choices, career choices and success, and even self-concept could be profound.

Purpose

The purpose of this study was to explore the possibility of a relationship between specific styles and aspects of comments teachers make on student papers and the writing apprehension levels of the students receiving those comments. Little if any research has been done into the exact causes of writing apprehension, and although the impact of teacher comments has long been suspected, there is not sufficient empirical evidence to reliably support this belief. This study could provide information to help answer questions about the effect various aspects of teachers' comments might have on students' apprehension. A study of this phenomenon was necessary and important, in view of current emphasis on writing across the curriculum. While it may be the responsibility of composition teachers to instruct students in the basic writing skills needed for effective writing, every instructor who grades and comments on papers has an impact on the

writing apprehension levels of his or her students, and an awareness of that impact could be helpful to students in every field of study.

Research Questions

In order to achieve the goal of exploring how teacher comments might have affected student writing apprehension, several lines of inquiry were explored. These included the following:

1. In what way or ways does placement of faculty comments, i.e., in the paper's margins, at the end of a paper, close to where there are structural or other issues associated with sections of students' work, or on a separate page, affect how the comments themselves are interpreted and perceived by students?
2. How, and to what degree, are student perceptions of faculty comments affected by the appearance of the comments, especially as determined by the writing implement used, whether pen or pencils of various colors (i.e. black, red, green, or purple), typed (if provided on a separate page), or by faculty penmanship styles, i.e. uppercase, mixed case, lowercase, underlined, dark/light, legible/illegible, etc.?
3. What relationships, if any, exist between the use of comment marks such as symbols, abbreviations (i.e., frag., tr., sp.), single words, phrases, complete sentences, and explanatory paragraphs, and student perceptions of teacher criticism?
4. How do students respond to various comment tones (encouraging, critical, impartial, hostile, or resigned) with respect to writing apprehension levels?

5. What other specific aspects of teacher comments could be associated with increased student writing apprehension?

Operational Definitions

Some of the following terms are based on Daly and Miller's (1975a) work in writing apprehension, and conform to the definitions that they have used. The remainder, while conforming to the terms and definitions used by Daly and Miller, are drawn from other sources dealing with related issues.

- Writing apprehension: The high degree of anxiety some students experience when asked to write (Smith, 1984).
- Teacher/instructor: Terms used interchangeably, in this study, to denote a person who teaches or instructs in a classroom at any level in the public school system, or in undergraduate or graduate classrooms.
- Response: A teacher's written comments to student writers on or about their drafts or final papers (Phelps, 2000).
- Teacher comments: Any written response given on, or with respect to, student papers. These include symbols, words, phrases, complete sentences, or even paragraphs (Bardine, 1999; Bardine, Bardine, & Deegan, 2000; Lunsford & Straub, 2006).
- Global feedback: Comments on the content of a paper (Wiltse, 2001; Wiltse, 2002).
- Local feedback: Comments on the mechanical writing issues of a paper (Wiltse, 2001; Wiltse, 2002).

- Writing skills self-efficacy beliefs: The level of confidence students have in their writing mechanics skills, such as spelling and punctuation (Wiltse, 2001; Wiltse, 2002).
- Writing task self-efficacy beliefs: Students' confidence in their ability to accomplish specific writing tasks (Wiltse, 2001; Wiltse, 2002).
- Comment tone: The underlying mood of comments, as perceived and identified by student respondents, and divided into the following categories, with examples provided:
 - Positive: "Good work," or "Well done."
 - Encouraging: "Good start, keep working," or "You have improved this."
 - Negative: "This is very poorly written," or "Sloppy, careless work."
 - Impartial: "You need a comma here," or, "This could be explained more clearly."
 - Hostile: "Why are you even in college?" or "You really do not belong in this program."
 - Resigned: "I give up, but I'm giving you a passing grade anyway," or "You will never be a good writer."

Assumptions

Several assumptions were made in undertaking this study. First, it was assumed that student respondents were able to clearly recollect and accurately report the types of responses they received in their past. Limiting target groups to those students most recently exposed to teacher comments, whether high school or college, was intended to

optimize this possibility. Second, it was assumed that the students' responses on the questionnaire and writing apprehension scale were honest and accurate.

Delimitations

During the course of this study, the name Littleton State University was used as a pseudonym for the upper Midwestern university at which the research was conducted. Only freshman students in Composition I classes and college seniors who were preparing to graduate from Littleton State University were surveyed, in order to measure the impact of comments by high school and college instructors, respectively. Students in Composition I cover the full range of majors, and a large number of those students have not yet declared a major. Seniors who were preparing to graduate were drawn from the Departments of Business, Education, Math and Computer Sciences, Nursing, and Social Sciences only.

Limitations

Some limitations did arise during the course of this research. Several surveys were only partially completed, rendering them invalid. In addition, the number of respondents among Composition students was more limited than anticipated. This was due, in part, to a reduction in the number of sections of Composition I offered over the last several years.

Limitations also arose with regards to the senior students who were preparing to graduate. Because several departments involved did not require any formal meeting between students and advisors, some students never met with their advisors during the spring semester when data were being collected. Their responses were therefore not available. Some departments found ways to administer the survey to seniors in group

meetings or classes, which helped to increase participation. In some cases, however, students who were not surveyed in one department actually had double majors and were surveyed in another department. For example, many students in Social Sciences are also in the Department of Education, and the survey was administered to all seniors in that department. Because of the overlap caused by the double majors carried by these students the population was more varied than it may have initially appeared.

CHAPTER II

REVIEW OF LITERATURE

American adults need a wide variety of literacy skills in order to be successful in their careers and to enable them to participate fully in American life. Being highly literate also helps individuals keep up with advances in technology and education, and achieve personal and familial goals (Baer, Cook, & Baldi, 2006). In addition to reading a wide variety of material, adults must be able to write effectively in both their personal and professional lives; however, for some people there are serious barriers to effective literacy. One important barrier is writing apprehension.

Definition of Writing Apprehension

Writing apprehension, according to John Daly (1978) who first identified it, is an anxiety that is specific to writing. Daly's own definition became somewhat more precise when he said that it was an anxiety that remained at a relatively constant level for each individual, and varied between individuals, and that it was concerned with whether people approached or avoided writing. This phenomenon is also referred to as composition anxiety, writing anxiety, and writing block (Onwuegbuzie, 1999).

Other researchers (Popovich & Masse, 2005) have suggested that individuals may be classed as apprehensive when their anxiety about writing is stronger than their anticipation of any positive outcome from having done so. An even more comprehensive definition might be that provided by Mabrito (2000) who said that writing apprehension

was actually a collection of behaviors that included avoidance of writing, a perception of writing as unrewarding, fear of the evaluation of one's writing, and anxiety about having other people read one's writing.

Writing apprehension, while important, is not a definitive diagnosis. Rather, it is a construct which divides those who enjoy writing from those who struggle with strong feelings of anxiety when writing is required. Although the issue was studied intensely in the first few years after its identification in 1975, after that there was little examination of the phenomenon, and very few of those studies involved undergraduate college students.

Despite increasingly clear and specific definitions, the origin of writing apprehension is still under debate. Wiltse (2002) raised the question of whether it was writing apprehension that caused poor writing skills or writing deficiencies that resulted in apprehension, and he reported that a number of researchers had suggested that writing apprehension and poor writing skills might be reciprocal; that is, poor writing could cause writing anxiety, or vice versa. However, even some students with relatively good writing skills experience high writing anxiety levels.

Whether the poor skills or the apprehension developed first, or whether they emerged simultaneously and interactively was not determined (Daly & Miller, 1975a). If low skill levels were initially present, a downward spiral could develop, as poor quality writing leads to negative teacher comments, which in turn may result in still higher apprehension levels. However, if the apprehension existed before the skill problems arose, then the apprehension itself could be considered a possible causative factor. In any case, the impact of teacher comments is significant, and would be worth studying. Could the approach instructors take to teaching writing help to resolve student apprehension?

Would students be more or less apprehensive after instruction, for example, in basic grammar and punctuation skills? Are there other possible causes of writing apprehension that could be investigated, and if so, what might they be?

Experiencing an emotional reaction like apprehension to the task of writing is not surprising, because writing not only calls upon a cognitive process, but is an emotional activity which can sometimes be personally revealing. Because of this emotional involvement in the activity, writing apprehension can have a particularly strong impact on those who do not believe they write well (Wiltse, 2001). How, then, can writing apprehension be detected? Can it be measured? Perhaps even more important, is it possible to identify causative factors?

Measuring Writing Apprehension

Student attitudes toward writing, whether apprehensive or not, are significant predictors of writing success, and the construct identified as writing apprehension is most appropriately and accurately measured by the Daly-Miller Writing Apprehension Scale (or test) which has been found to be valid and reliable in numerous studies (Bline, Lowe, Meixner, Nouri, & Pearce, 2001; Bline, Lowe, Meixner, & Nouri, 2003; Daly & Miller, 1975a; Wiltse, 2006). When Daly and Miller (1975c) developed the Writing Apprehension Scale that is widely used today, they were among the earliest to attempt to measure the phenomenon of writing apprehension. Daly and Miller (1975a) composed 63 statements in a likert-type scale format, identified a one-factor solution focusing on apprehension specifically, and then reduced the 63 statements to the 26-item scale that is now in use. (See Appendix A)

This Writing Apprehension Scale has dominated the study of writing apprehension, and has itself been studied. Research (Bline, et al., 2001) into the psychometric properties of this scale has focused on the identification of factors within the instrument. Bline investigated the impact of item order on the number of factors identified in the Writing Apprehension Scale, in an attempt to determine the stability of the tool. In doing this, Bline provided further evidence that the Writing Apprehension Scale is a robust and specific evaluation tool. That structure was unaltered by changing the order of the items, indicating a high level of strength of factor structure

Impact of Writing Apprehension on Attitudes

Despite the scarcity of recent research in the field of writing apprehension, and the very few studies dealing with college students at either the graduate or undergraduate level, the literature (Popovich & Masse, 2005) still suggests that a student's attitude toward writing is critically important. Students who have high writing apprehension levels show a number of specific attitudes within the complex. First, they view writing as difficult, challenging, and even threatening. These students also perceive themselves as ineffective, if not inadequate, when faced with writing tasks. Further, they tend to focus on the most negative and undesirable aspects of their perceived ineffectiveness, such as failing a class, and actively anticipate failure and the loss of respect they expect to receive from others (Sogunro, 1998).

An examination of student writing apprehension levels is important. The more writing instructors can learn about students' individual attitudes toward writing, especially at the outset of the course, the more opportunities the instructor may have to address anxiety issues and implement personalized strategies that could help students

gain much needed confidence in their writing abilities (Popovich & Masse, 2005). In addition, negative attitudes about writing are often self-fulfilling, even if a writer actually has good basic writing skills. For students with limited writing experience, especially those anxiety-ridden apprehensive writers who avoid writing whenever possible, a conundrum develops. Those apprehensive students dislike writing, and avoid both writing itself, and instruction in how to write, which reduces the amount of practice they get, and in turn increases their writing anxiety levels, and discourages them from writing (Wiltse, 2002). In the years following the identification of writing apprehension, Popovich & Masse (2005) determined that a large percentage of the population was affected by some level of writing anxiety. In fact Bloom (1980) estimated that between 10% and 25% of the population experienced an inhibiting level of writing apprehension. That level has not changed significantly over the intervening decades.

Although composition teachers were among the first to explore the relationship between anxiety and performance, they were quickly followed by media writing teachers such as journalism and mass communication instructors. Students in media writing courses experienced fear, frustration, and continuous anxiety about the skills required in their chosen careers, especially if they had high levels of writing apprehension. A certain level of nervousness may be expected when beginning a writing assignment, but enduring apprehension can block student progress. Communication researchers (Popovich & Masse, 2005) expressed concern about writing apprehension and its effect on human communication, as have other researchers since the 1960s. They found that students with high levels of writing apprehension described their experiences with writing in far less favorable terms than did the students with low writing apprehension levels. Students with

low writing apprehension levels did not report experiencing writer's block, but expressed confidence in their competence as writers. More doubtful, higher anxiety students, however, not only expressed concern about their mechanical skills, but revealed a tendency to procrastinate when facing a writing assignment, dissatisfaction with writing in general, and an aversion to the task (Popovich & Masse, 2005).

The impact of writing apprehension is also seen in the way students approach writing tasks in general. Students with high writing apprehension levels may procrastinate to the point of failing to turn in written assignments. They may avoid attending class when in-class writing is anticipated, and take as few writing-centered classes as possible (Daly & Miller, 1975b; Faris, Golen, & Lynch, 1999; Wiltse, 2006).

Impact of Writing Apprehension on Writing Skills

The first behaviorally oriented area in which the impact of writing apprehension was found was in the writing skills of affected students. Individuals with low writing apprehension levels tend to have better writing skills than those with high apprehension levels. Researchers (Faris, Golen, & Lynch, 1999; Wiltse, 2006) also investigated the impact of writing apprehension in different fields of study, and found that the type of academic writing can affect writing apprehension levels. Wiltse (2002) discovered that those with high apprehension levels enjoyed personal forms of writing, such as letters, to a greater degree than they enjoyed more formal types of writing. However, those with lower apprehension levels did not express such a preference. This could be related to the fear highly apprehensive people have about evaluation of their writing, and the lack of evaluation in those more personal writing arenas. In addition, highly apprehensive writers

are uncomfortable writing about feelings and prefer, when forced to write in a formal context, to address issues of fact (Reeves, 1997).

Onwuegbuzie (1999) reported that students with high levels of writing apprehension wrote with less profundity and competency, especially when syntactic structure was evaluated. The writing of those apprehensive students was also less clear, perhaps because they lacked the ability to manipulate language in the way that is necessary for adequate written communication. Apprehensive writers, in fact, performed less successfully than non-apprehensive writers on comprehensive writing skill tests. Their writing was of lower quality, and did not demonstrate the same level of writing skill as was demonstrated by those who were less apprehensive. In addition, those who exhibited high levels of apprehension used less sophisticated structural characteristics in their writing, as well as having generally lower message quality (Popovich & Masse, 2005).

Because apprehensive writers avoid writing and writing instruction, they prevent themselves from learning important skills that could improve not only their writing, but their apprehension levels (Onwuegbuzie, 1998). Poor writers may not have practiced basic writing skills such as sentence structure. Those skills, while present in short-term memory storage, never move to permanent, long-term memory. When a skilled individual writes, their use of basic writing skills and other knowledge stored in long-term memory is almost automatic, which allows them to focus their thoughts on more immediate writing tasks, such as content and organization (Wiltse, 2002). Highly apprehensive writers have prevented themselves from reaching this developmental stage (Onwuegbuzie, 1998).

Impact of Writing Apprehension on Choice of Course, Major, and Career

The importance of writing apprehension becomes even clearer when one realizes that it has been linked not only to writing success, but to major life decisions, as students with high levels of apprehension select both college majors and careers which, in their views, require less writing (Daly & Miller, 1975b). Students with high levels of writing apprehension find writing onerous, rather than rewarding, and will avoid writing-centered classes if at all possible. In addition, apprehensive writers choose majors where they expect little writing to be required, while less apprehensive students often choose majors in which writing is a strong component. This trend can also be seen after college, when apprehensive writers enter occupations where they anticipate little writing (Wiltse, 2006). Further research by Popovich and Masse (2005), emphasized the broad impact that writing apprehension can have, when it showed that students with high writing apprehension levels rarely enrolled voluntarily in advanced writing courses.

In one study that examined writing apprehension among students other than those in composition classrooms, Popovich and Masse (2005) found that students with high writing apprehension levels actually chose broadcast journalism over traditional print media. They may have assumed that they would only have to speak, and not write their material, supporting earlier findings that highly apprehensive writers chose not only majors, but also careers where less writing was expected.

Accounting is one field that highly apprehensive writers have found appealing, under the assumption that little writing would be required. However, an increasing number of instructors and practitioners in accounting have begun to express dissatisfaction with the writing skills of college graduates in the field, and it is not

surprising that accounting majors were found to have significantly higher writing apprehension levels than students majoring in other fields. Once again, writing apprehension was found to be a factor affecting not only the writing skills, but the choice of major for accounting students who thought they would only need to work with numbers (Faris, Golen, & Lynch, 1999).

Impact of Writing Apprehension on Self-Perception

While the impact of writing apprehension on a student's ability to write has been examined, and is widely accepted, a question remains as to whether the impact is limited to writing skills and choices or whether it extends beyond those realms. Is it possible that writing apprehension could have an impact even beyond the writing skills of students? In fact, it is highly probable that an individual with high writing apprehension levels will have a negative perception of his or her own competence in other academic and career areas. Though there has been only a small amount of research on the correlation between writing apprehension and various aspects of self-perceptions, research (Onwuegbuzie, 1999) does suggest an inverse relationship in which high writing apprehension levels are closely linked with low self-perception. Among the findings of that research was the probability that perceived creativity is also related to writing apprehension, although less so than to overall self-perception. Those students who exhibited high writing apprehension levels not only wrote shallow, under-developed papers, but also reported lower perceptions of themselves, as students and as individuals, and viewed themselves as less creative in general than did students with lower writing apprehension levels. This study did not specify a causal relationship, and questioned whether the high writing apprehension reduced students' self-perception, or vice-versa (Onwuegbuzie, 1999).

The same study (Onwuegbuzie, 1999) evaluated students' scores on the Writing Apprehension Scale and found them to be related to five of the six dimensions of self-perception that Onwuegbuzie investigated. This still does not mean that writing apprehension causes difficulty with self-perception, or vice versa. While it is indeed possible that high writing apprehension leads to lower perceptions of scholastic competence and creativity, it is equally possible that the factors feed into one another, with apprehension and self-perception affecting each other.

Writing apprehension is also negatively correlated with self-concept, self-esteem, and self-competence measures. The obvious correlation between the fear of writing and the enjoyment of writing carries over into other aspects of life, perhaps in part because of the importance of writing in our very literate society (Wiltse, 2006). Since writing apprehension is negatively correlated with self-concept, self-esteem, and self-competence, the fear of writing clearly is related to the enjoyment of writing and to self-confidence and self-esteem overall (Wiltse, 2002). Wiltse also found a correlation between writing apprehension and both writing self-efficacy, defined as the effectiveness of one's writing, and writing outcome expectations. Although a few apprehensive students seemed to gain confidence, and reduce their writing apprehension levels, most struggled with anxiety and self-doubt, as well as other negative attitudes toward writing itself, throughout their college career and into the work force (Popovich & Masse, 2005).

Population Affected by Writing Apprehension

It would be convenient to conclude that writing apprehension affects only students, especially those in English classes. However, the impact can be found in many fields of study, as well as in the workplace. It is seen at all ages, and in all geographic

areas. In spite of the fact that the original work in the field of writing apprehension indicated that this anxiety affected people in different disciplines, most of the studies since the 1970s have been in the field of English composition (Wiltse, 2006). Does the problem extend, however, beyond the English discipline? How does it affect students and practitioners in other fields?

Writing apprehension, and the impact it has, have been investigated in a variety of contexts and subject areas. The Writing Apprehension Scale (Daly & Miller, 1975a) was administered to students taking on-line classes, and the results indicated that they, like their classroom compatriots, experienced writing apprehension (Bline, 2001). Business students have also been identified as being among those affected by writing apprehension. Concerns about teacher/student communication in an on-line class in business writing led to an investigation of the writing apprehension levels of students in the program. Not only was the study unique in that it compared the on-line communication behavior of highly apprehensive students and non-apprehensive students who wrote for both local and global audiences, but it clearly showed yet another group for whom writing apprehension was an issue: the business community, with both business students and work force members being affected (Mabrito, 2000). Faris, Golen, and Lynch (1999) also found that students majoring in accounting struggled with high levels of writing apprehension.

Another group that has been found to be affected by writing apprehension is communication majors. Rechten and Dizinno (1997) hypothesized that the results of a writing attitudes test would differ between the freshman to whom they administered that test, and the more homogenous groups of business and communication majors to whom it

had been administered earlier. The hypothesis was partially supported when the factors found among the two groups' results were different. These results could have been caused by the heterogeneity of the freshman group, but also indicated that writing apprehension, while an issue for freshman students, continued to be an issue for upper level students majoring in communication (Rechtien & Dizinno, 1997).

Although there is a tendency to consider writing apprehension an issue for undergraduates or high school students, that is not the case. Graduate students are also found to struggle with writing apprehension (Onwuegbuzie & Collins, 2001). The impact of writing apprehension was seen in both undergraduate and graduate students, and interfered with the students' ability to write papers and research proposals. Apprehensive graduate students produced papers, and even proposals, that were underdeveloped, shorter than average, unclear, and more affected by grammar and punctuation errors than proposals written by students with lower writing apprehension levels (Onwuegbuzie & Collins, 2001).

More and more employers are also finding that those new employees who already hold not only baccalaureate degrees, but even advanced degrees, often struggle with writing. The pervasive apprehension of writing that Daly first identified has been found to be at the root of that writing difficulty for those in the work force, no less than for students (Wiltse, 2006).

Onwuegbuzie and Collins (2001) found that the fear of failure and task aversiveness so closely connected to writing apprehension were the primary causes of procrastination of writing tasks. Although fear of failure was perceived as related to anxiety about evaluation and to an overly perfectionistic attitude toward writing, task

aversiveness actually reflected an active dislike of the activity under discussion. If procrastination on writing assignments stems from the fear of failing, and if task aversiveness is associated with high apprehension about writing, then the procrastination so often found among college students at all levels could originate from, and lead to, anxiety about writing. Onwuegbuzie and Collins (2001) reported that up to 95% of students procrastinated on academic tasks such as writing. Furthermore, 41.7% of graduate students indicated in self-reports that they frequently or always procrastinated in writing term papers, and Onwuegbuzie and Collins (2001) found this procrastination to be closely related to writing apprehension levels. This could explain, at least in part, why approximately 50% of doctoral candidates in educational programs never complete their degrees. In fact, nearly 20% of students complete the coursework, but give up when facing their dissertation (Onwuegbuzie & Collins, 2001). If these things are caused, at least in part, by writing apprehension, which appears to be the case, could techniques be found which might reduce writing apprehension levels among graduate students, or at an earlier stage, such as during the undergraduate or high school years? What impact might changes in teacher comments have on graduate students' writing apprehension levels? How might that change their feelings as they approach their dissertations?

Interestingly, female students were found (Popovich & Masse, 2005) to have significantly lower writing apprehension levels than males, perhaps making the issue even more concerning for males than for females. Whatever the gender or field of study, writing apprehension, at its most severe, can cause some highly apprehensive students to ignore an instructor's comments and other feedback because they are so certain, after

years of failure, that they will not be able to meet the instructor's expectations (Wiltse, 2002).

While research has shown the impact of writing apprehension on widely varied groups, over a period beginning in the 1970s, the importance of investigating the issue is not to determine whether it exists. There are more important questions to ask. What impact does writing apprehension have? What might teachers be doing that exacerbates the situation? What could they change in their teaching and commenting methods, and how might those changes affect the writing apprehension of students? Is it possible for instructors to actually reduce writing apprehension levels among their students?

Research into Teacher Comments

An instructor's primary goal and hope, in making comments on student papers, is to help students improve their writing by teaching them to do something differently in the next draft or the next paper (Wiltse, 2002). Despite these goals, and the fact that almost every teacher and college instructor addresses comments of one type or another to students with regards to their writing, clear and concise definitions are scarce. What type of comment can be considered a clear and thoughtful one? What effect do teacher comments actually have on the improvement of student writing (Sommers, 1982)? Perhaps because there is so little specific guidance available, teachers sometimes inadvertently comment in ways that do not help the writers, for example by making comments that are vague or nonspecific (Wiltse, 2002). This could be partially due to the fact that teachers rarely receive specific training on how to comment on students' papers. In addition, most teachers are hesitant to share their own written comments with other teachers. Even the more complete and free-standing comments found at the end of papers

are not generally preserved or shared, and teachers rarely have the time or opportunity to re-read comments they have made on student papers (Smith, 1997). Sommers (1982) reported on a study of the commenting styles of 35 college instructors in New York and Oklahoma that involved examining the teachers' comments on first and second drafts of papers and interviewing some of the teachers and students involved. The teachers' comments were compared to comments provided by a computerized paper grading program. While broader than other studies, this particular research was still quite limited in the number of teachers, students, and comments examined.

In addition, most research into how teachers respond to students' writing is situation-specific and anecdotal, offering little real guidance to teachers hoping to optimize the impact of their comments (Anson, 2000). The sometimes disproportionate amount of time writing instructors spend in writing comments on students' papers demonstrates the importance teachers place on their comments (Wiltse, 2002). In fact, teachers estimate that commenting on each student paper requires between 20 and 40 minutes. When that number is multiplied by the twenty to forty students in each class, and by the number of papers each student writes, the time demand becomes a daunting one (Sommers, 1982). Those comments are sometimes ignored or at least not used in further drafts of the papers, which can be a source of frustration for the teachers. Instructors may become even more frustrated when students simply delete difficult passages rather than re-writing them according to suggestions made (Wiltse, 2002). Obviously, teachers put a great deal of effort into writing their comments on student papers, but there is much to learn. What type of comments is most effective? How can comments be phrased in such a way as to encourage students to actually make use of

them? What aspects of teacher comments have the most impact on student perceptions of those comments? How can instructors devise well-written comments that are also specific and tightly focused?

In the past, research (Smith, 1997) into teacher comments has focused first on how well comments serve to help students to re-write their work, and then on the existence of discrepancies between the goals teachers had for their comments, and their actual impact on student writing. There have always been those who have insisted that instructors' comments did not achieve their goals because they were poorly written, non-specific, and unfocused. All the scholarship that has been focused on teacher comments, however, has not changed the confusion teachers feel when faced with conflicting advice about whether to make only positive comments, thus denying attention to student errors, or whether to address those errors, even in the kindest possible manner (Anson, 2000). While many teachers limit their comments to those which communicate criticism, commands, or correction, others include praise, advice, questions, and reader responses, helping the student to see how an ordinary reader might respond to his or her words (Lunsford & Straub, 2006).

Teachers are clearly concerned about how best to comment on student papers (Wiltse, 2002). Bardine, Bardine, and Deegan (2000) found that students viewed written comments primarily as clues on ways to get a better grade. They did not, however, connect those comments with learning to be better writers, a subtle but critical difference in perceived purpose. In fact, although students conceded that it was important to read the comments, they also admitted that they spent only a moment or two doing so. In spite of this, it is clear that instructor comments can be helpful if the students use them as the

instructor intended. One study (Wiltse, 2002) found that students were more willing to focus on instructor comments when they believed that if they did, it would actually improve either their writing ability or their performance. While teachers viewed the comments they made on papers as exactly the type of teaching tools that would help students become better writers, students often did not seem to benefit from those comments. Bardine, Bardine, and Deegan (2000) determined that teachers needed to improve, not only their comments, but their communication with students about those comments.

Bardine (1999) reported that many people feel there is an accepted unwritten canon for teacher comments on student writing. The irony is that this code allows the instructor to be vague while asking the student to be specific. Bardine administered a questionnaire to students and then interviewed five of those students. Following transcription and analysis of those interviews, he conducted a focus group with four other students, to find clarification of his initial findings. He looked for patterns within the responses of these students, in order to find out what kinds of teacher comments on student writing were most effective, and discovered that students preferred suggestions or explanations to instructions or directions, but that they were willing to accept negative comments if they were phrased in a positive way. These findings raise renewed questions about the importance of tone, as well as phraseology of written comments.

A later study by Bardine, Bardine, and Deegan (2000) added classroom observation and a hands-on analysis of teacher comments to subsequent student interviews. This qualitative approach to understanding the impact of teacher comments is much more common than quantitative approaches, but has been largely limited to English

classes. Though Bardine, Bardine, and Deegan used a literature class in their research, most investigation into teacher comments, as well as writing apprehension, has been done in composition classes.

In her detailed analysis of instructor comments placed at the end of papers, Smith (1997) found that positive comments were being made more often than is commonly assumed. In view of the amount of advice on providing positive comments, it was interesting to note that her study found that four out of five comments about the paper as a whole were positive, regardless of the grade assigned to the paper. This might be due to the amount of concern about providing positive reinforcement, or out of concern for the impact a negative comment about the entire paper could have on student confidence. However, Smith wondered if the convention of providing exclusively positive comments had led teachers to provide positive evaluations even of papers which did not warrant a positive response.

This positive tendency did not stop with evaluations of the papers as a whole. Two-thirds of the comments about rhetorical effectiveness were also positive, and negative evaluations of effort were rare enough to be perceived as occurring only when the teachers were so frustrated that they found themselves emotionally unable to be concerned with the impact of their comments on the student. Three-quarters of the comments on the students' choice of topic were also positive, but evaluations of mechanical correctness were 100% negative (Smith, 1997).

Another study (Ferris, 1997) has revealed different results, indicating that two-thirds of the comments provided by the teachers whose written responses to student writing were studied were offering advice and suggestions, not just corrections. This is

interesting because although correcting mechanics is important, students pay attention to what they receive comments about. If most of the comments students see are about mechanics, they will focus most of their attention on those issues, rather than grappling with what they perceive as the more difficult content issues (Bardine, 1999).

In part, this selective use of instructor comments could be caused by a tendency for students to become overwhelmed, and feel unable to respond to all of the comments written on their papers. In addition, students often misunderstand the teachers' intentions. In fact, although most researchers agree that feedback is necessary, and hopefully effective in improving student writing, students are still forced to interpret what the comments mean and how to utilize them (Wiltse, 2002). Instructor comments, even those with specific instructions, can leave students confused. If students are revising papers mainly to get higher grades by fulfilling what they perceive as the demands of the instructor, those students who are highly apprehensive may find it expedient to delete the most difficult passages. Comments may only be fully effective when students truly desire to improve their writing skills. Many students, however, were not confident enough in their own revising abilities to feel capable of success (Wiltse, 2002). Clearly, much remains to be investigated in the area of teacher comments and their impact on student writing. If writing apprehension is discouraging students from making changes suggested by instructors, how can teacher comments be presented in a way that would encourage, as well as instructing? Would encouraging comments help to overcome any possible existing writing apprehension, reversing the cycle of poor skills leading to apprehension, and on to increasingly poor skill? Are suggestions and comments offering advice more

helpful than those offering corrections? Do instructor comments have a direct impact on writing apprehension levels, and if so, what kind of impact do they have?

Attempts to examine students' interpretations of teachers' comments have focused on determining which comments or types of comments students have found to be most helpful, particularly in revision of their papers. Some studies have used a survey format, while others have used the interview and observation formats of qualitative research (Fife & O'Neil, 2001; Bardine, Bardine, & Deegan, 2000; Faris, Golen, & Lynch, 1999; Ferris, 1997; Krol, 1998; Matthews, 2006; Phelps, 2000; Popovich & Masse, 2005; Smith, 1997).

Fife and O'Neil (2001) found it helpful to provide students with information on the rhetoric of commentary, explaining what various comments, marks, and symbols meant, and why they were used, as well as what it was hoped the students would actually do to their writing as a result. This could improve the dialogue, and reduce misunderstandings between teacher and student. Since students did not always understand the teachers' written responses in the way the instructors intended them, examining failings in that method of communication could be critical to improving it. The weakness of this approach is that it does not consider the context of the classroom, and what the teacher may or may not have done there to keep communication clear. Still, by analyzing the comments themselves as texts, one can examine the impact of those words and phrases on students in terms of the effect they have on student feelings of success, failure, or anxiety.

In terms of suggestions for teachers, research offers the same strategies that were offered almost thirty years ago, in a continuing attempt to help instructors make their

comments more effective, and the students' responses more positive. Teachers are still advised to make more positive comments than negative, to keep comments brief, and to avoid overwhelming students with too many comments, among other techniques. The value of written response has never been questioned. However, a broadened model has begun to develop, in which instructors are urged to view written comments as a negotiation or a dialogue between student and teacher, focused on how best to revise a paper to achieve the students' goals (Fife & O'Neil, 2001).

This concept of teacher commentary as dialogue or conversation has raised questions of its own, because many people consider the terms "conversation" and "dialogue" too general to be of practical use. The use of the term conversational to describe instructor comments has come to mean any response that is informal, positive, nurturing, or even nonprescriptive. While the terms do tend to put the teacher in the role of reader or coach, rather than critic, they do not necessarily indicate, in most cases, a true negotiation or dialogue. To develop the interactive aspect of teacher comments, instructors must involve students in a teamwork-oriented revision process, in which the collaboration is intended to help developing writers find new ways to approach problems within their writing as well as teaching independent problem-solving skills (Fife & O'Neil, 2001). Can this be accomplished through instructor comments? If so, how might the tone of those comments contribute? What other factors might have an impact?

The literature on teacher comments often cautions teachers to avoid comments that are vague, standardized, and lacking specific reference to the individual paper. One concern that teachers repeatedly express about the impact of their comments is the need to encourage students to make changes that will improve their writing, but to do so in a

way that does not change the inherent message of the paper, or take students' focus away from the message they were trying to communicate. When a teacher takes too much control of the intended message in a student's writing, they may defeat the purpose of the comments, which is to help students communicate their thoughts in a clear and effective way. This can be a particular risk when teachers focus too intently on errors of style, grammar, usage, and diction in a first draft. In asking students to correct these errors, teachers may give the impression that these are the most important aspects of their writing. Students may then focus on those details rather than on the message they intended to convey (Sommers, 1982). Teachers are also warned not to take control of their students' writing by making comments that require the students to change the underlying theme or message of their papers to something other than they had initially intended, or to evaluate the papers against an ideal rather than based on the students' goals for the specific writing assignment (Fife & O'Neil, 2001).

There are several conclusions to be drawn from these guidelines. First, instructors need to be as specific as possible in their comments. They also need to include praise, but only honest praise that is well-deserved. Ferris (1997) found that students use positive comments from teachers to improve their writing, as well as to boost their self-confidence. Instructors need to review their own comments for style, tone, and completeness so that they are aware of what they are doing. Only then can they evaluate the impact their comments have on students. The sad fact is that many teachers write comments on student papers that are so general, and so unrelated to the context, that they could be moved from one paper to another without losing any of their meaning. These

very formulaic comments do not provide the type of specificity that would be truly helpful to student writers (Sommers, 1982).

Most of the research into teachers' comments focuses on written commentary style, based on the assumption that the problems of ineffective response stem from the way those comments are written (Bardine, 1999; Bardine, Bardine, & Deegan, 2000; Fife & O'Neil, 2001). Are there, however, other factors within teacher comments that might have an impact? Is wording of comments the most important issue, or does placement matter? What impact might color have on a student's response to a teacher's comment? How do students perceive the tone of instructor comments? Does the wording affect student perception, or do pen color, penmanship, or placement of the comments affect that perception?

Categories of Teacher Comments

Teacher comments can be divided into a number of categories, and textual analysis is one way to devise categories that could suggest important techniques by which instructors might encourage students to improve their writing (Fife & O'Neil, 2001). One option for a preliminary division might be that of global, as opposed to local, feedback. Global feedback is defined as comments on the content of a paper, and local feedback is defined as comments on the more specific mechanical writing issues. The two are equally important (Wiltse, 2002). Beyond the division of response into global or local feedback, comments can be further divided into categories for the purpose of analysis and improvement.

One category of comment that has been frequently discussed is that of constructive criticism, which has been found to help increase students' confidence in

their ability to write, as well as to motivate them to work on improving their writing skills (Wiltse, 2002). In improving confidence levels, it seems that this type of comment would work to reduce writing apprehension, which tends to be higher in poor writers than in skilled ones.

The matter is not as simple, however, as providing students with constructive criticism. Comments intended to be constructive can sometimes be perceived as purely critical, increasing apprehension and dislike of writing, as well as causing apprehensive writers to give up trying to improve their work. In those cases, the comments that were intended to be constructive may have been, not only unhelpful, but actually harmful to the students (Wiltse, 2002).

Straub (1996) divided instructor comments into two broad categories: directive and facilitative. While noting that not all directive comments are wholly bad, and not all facilitative ones are purely good, and that most teachers use a combination of the two types, he presented a number of examples demonstrating how the different types of comments could be identified and used. Directive comments generally consist of those that tell the student what to do and how to do it. The risk of making directive comments is that, in doing so, teachers tend to commandeer, or to take control of, the students' writing, substituting the instructor's judgment about message for the student's. Over the last twenty years, scholarship into the teaching of writing has tended in the direction of utilizing facilitative comments instead of directive ones, because they tend to be more open-ended, asking the student questions, and allowing him or her to decide exactly how to re-write in response. A slightly different way to view this dichotomy is as one of authoritative commentary or collaborative commentary, with directive, or authoritative

commentary being viewed as more critical and less helpful. Facilitative comments, on the other hand, tend to place the instructor in the position of reader or collaborator in helping the student accomplish their writing goals. This can be a difficult balancing act, because whenever a teacher offers suggestions or assistance, students may view them as instructions, putting them into a more directive mode than that in which they were intended.

While most teachers in the Straub (1996) study seemed to use a blend of directive and facilitative comment styles, one teacher (Elbow) whose comments were usually placed in a separate letter to the student, was seen as using comments that were clearly facilitative. He served more as a reader responding than as an instructor on how to get the paper into a specific form or structure, asking questions and making comments that allowed the student to determine in which direction she wanted to take her work.

Ferris (1997) developed some categories of instructor commentary during the course of his research. Among those were length, type, use of hedges such as please or maybe, and whether the comment was text-based or general. Other categories could be developed with these aspects of teacher comments being kept in mind. This list was multiplied when Lunsford and Straub (2006) added categories of comment that dealt with such things as ideas, development, global structure, local structure, wording, corrections and conventions, and extra-textual comments, all of which could be sub-divided and expanded upon.

Smith (1997) analyzed 208 end comments written by teaching assistants at Penn State and an additional 192 end comments written on papers culled from other research projects across the nation. After sorting comments so that there were approximately an

equal number from papers assigned each letter grade, she divided those end comments into 16 specific genres, falling into three groups. The three groups were judging, reader response, and coaching genres. The majority of comments made at the end of papers were judging comments, which could be divided into 11 specific genres, including evaluation of development, style, the entire paper, focus, effort, organization, rhetorical effectiveness, topic, correctness, audience accommodation, and justification of the grade.

Aside from the judging responses, Smith (1997) also identified reader response comments, and coaching comments. She then divided the reader response group into reading experiences and identification with the material. These genres of comment allowed the instructor to establish a personal relationship with the writer, as well as demonstrating the effect of the paper on a reader. Coaching comments provided an additional three sub-genres of comment: suggestions for revision of the current paper, suggestions for future papers, and offers of assistance.

Bardine (Bardine, Bardine, and Deegan, 2000) developed other categories of teacher response. Initially, he identified five types of response: questions, instructions, praise, answers, and attention drawing. Later, he added directional comments. Similar to instructional comments, which may contain a hedge like please or suggestions as to what a student might do, directional comments have a more commanding tone, and tell students what they should do, rather than suggesting or requesting.

Comment Placement

Placement of comments may become an important factor. For example, end comments seem to function in a very stable manner over both time and at varied institutions, according to a survey of 192 end comments (Smith, 1997). That stability in

itself may detract from the effectiveness of the comments, if students view them as formulaic, and not specific to their individual needs. One important suggestion made was that teachers avoid using the generic forms that are so often found, as exemplified by such comments as “good work,” “interesting point,” and other non-specific comments that are commonly used (Fife & O’Neil, 2001). Only 7% of end comments requested additional information, but students did seem to respond to those requests.

Marginal comments, on the other hand, focus to a high degree on asking students to provide further information, and students were found to respond by making the changes requested; however, though students made major changes in response to these comments, the results were not always positive. In fact, 10% of the changes made were considered by instructors to be negative or mixed, rather than positive in nature. Almost 25% of the marginal requests for information had no impact on future drafts, indicating that the student ignored those comments. This could be due to a tendency for students to have difficulty interpreting instructor comments and questions, so that they do not know how to incorporate the information requested (Ferris, 1997).

Comment Appearance

The appearance of comments may also have an impact on students, and could be analyzed based on color, handwriting styles, and legibility. Medium of comments should also be considered. For example, Monroe (2003) discovered that using both individual and listserve e-mail messages made it possible not only to comment directly on each student’s writing, but to encourage students to communicate with her and with other students. The students thereby received immediate feedback on their messages, and were able to tell if those messages had been clear and easily understood. An additional benefit

of this format was that the shy, quiet students had a chance to be heard, because they did not risk interruption by other students, or embarrassment if a spontaneous comment was not well received.

An issue which has come to the forefront in informal discussion of teacher comments in recent years is the color in which comments should be written. Although red has long been the traditional color for teacher comments, a negative attitude has developed toward the use of red pen or pencil. No empirical research was found on this subject, but opinions are strong. In fact, the Health Minister of Queensland, Australia, recently issued a health kit for teachers that recommended avoiding the use of red pen or pencil completely, for fear that it would damage the mental health of students (Lion, 2008a). Response was immediate, strong, and mixed. Some parents and teachers requested that the kits be eliminated altogether, while others insisted that red pen was indeed too hostile for youthful psyches (Lion, 2008b; Lion, 2008c).

Experts have also been called upon for their opinion, and color psychologists have been quoted by opponents of the use of red pen or pencil on student papers as saying that purple included the authoritarian mood of red, with the perceived serenity of blue, and would therefore be a better choice for use in teacher comments. In fact, this movement has gained so many adherents that pen manufacturers have reduced the number of red pens produced and increased the number of purple pens. Some instructors favor green for teacher comments, insisting that it stands for growth and learning. Yet others prefer the impermanent nature of standard number two lead pencils (Rabovsky, 2005).

These views are not without their own opponents, however. Editorials continue to appear, debating both sides of the question. Those who favor the use of red pen point out

that the passion and power of red is appropriate for a subject about which people feel as intensely as they do about their writing (Newcomb, 1998; Paver, 2005).

Opinions, however, whether from parents, from whom the red pen issue originated (Newcomb, 1998) or from teachers of varying years of experience, do not answer the questions about whether red, green, purple, blue, or black pen or pencil, or even typed or computer-generated responses, are most effective. Nor do those opinions clarify the impact of the color of comments on student writing apprehension levels, or student perceptions of the comments.

Comment Tone

An often-overlooked aspect of teacher comments is the tone, which students often interpret far differently than intended by the instructor. Tone can range from positive and encouraging to negative, hostile, or resigned. For example, a comment with a positive tone would be, "Good work," while an encouraging tone might be perceived in a comment that pointed toward future accomplishment, or recognition of improvement, such as, "Good start, keep working." A comment that might be perceived as having an impartial tone would be one that points out an error or makes a suggestion without any emotional content in particular, for example, "You need a comma here." While a comment with a resigned tone might imply a sense of futility, one with a negative tone would be more critical, and less hopeless in nature. For example, a comment with a negative tone might say something like, "Sloppy, careless work." A comment with a resigned tone, in contrast, might say, "I give up, but I'm giving you a passing grade anyway." Both comment tones could be construed as negative by a student, but the tone is slightly different. Hostile tone, on the other hand, is more aggressive and even

personally critical, and comments perceived as hostile in tone may sound almost like accusations, such as, "You really do not belong in this program." The important issue is not necessarily what the instructor intended (though some may indeed intend to make a negative comment) but how the recipient perceives the tone of the comment.

One reason responding to students' writing is difficult is because the teacher's role by its nature includes a certain level of judgment or criticism, making the tone and attitude of comments even more important than it might otherwise be (Bardine, 1999). The inherent judgment of the instructor's role may make students more sensitive to the tone of the comments than they might be to comments from a person in a different role, such as that of a peer or even a parent.

The way teacher comments are phrased contributes to the tone, and although comments making requests, especially for more information, were taken quite seriously regardless of their tone, only 55% to 62% of the revisions made in response to questions were evaluated as positive changes, while 8% to 19% had mixed effects, and 2% led to no changes at all. Imperatives, while generally rare in teacher comments, were taken seriously, especially when found in marginal comments, and 72% of those imperative comments led to positive changes (Ferris, 1997). This raises an interesting question. While students may prefer requests or suggestions, they seemed to respond more fully to imperatives. Why? How can this information be used as teachers struggle to formulate more effective commenting styles?

One aspect of phrasing that affects tone is the use of what Ferris (1997) referred to as hedges. This indicates the inclusion in comments of conditional words like please or

maybe, and their use changed the tone of comments from commanding, in some cases, to simply requesting, a tone with which students appear to be much more comfortable.

Some students have responded to questions by indicating that they want comments to be courteous, gentle, and helpful. More than that, they want responses that take them seriously, as individuals and as writers, and that do not dismiss their efforts or demean them (Bardine, 1999). Though this seems self-evident, exhausted teachers, in their own frustration over what they perceive as lack of progress, may sometimes lose sight of the student as a person. Students, not surprisingly, were not receptive to comments that they perceived as critical rather than helpful, and the tone of comments posed as questions was as important as the tone of comments phrased as statements. Any hint of criticism of the student or their writing was viewed as harsh and condemnatory, and was not well received (Bardine, 1999). This was confirmed by a further study done by Bardine, with Bardine and Deegan (2000) where students interviewed indicated that they objected to any comments that were harsh in tone, or commanding, though they were willing to accept specific negative comments, provided the tone was positive. Criticism, then, can be given, and positively accepted, depending more upon the tone than upon the subject of the comment.

A number of studies (Bardine, Bardine, & Deegan, 2000) have indicated that teachers, as a rule, do not praise student writing enough. Most comments (89.4%) pointed out errors or flaws in student papers, while only 10.6% offered any praise. Students learn more and pay more attention to comments that praise their work or make them feel good about what they have done. Correction alone does not help them improve their writing skills. However, there are caveats to be considered. Although it is important to provide

praise, it is equally important to remember that praise must be earned, and even young student writers can tell when positive comments are not valid. The task is for instructors to look for, and find, valid issues about which to offer believable praise (Bardine, 1999).

According to Smith (1997), however, the majority of comments in most areas were positive. Although Smith divided instructor comments into a number of categories before analyzing them in terms of praise or criticism, Bardine did not. It is conceivable that the comments on mechanics, which Smith found to be 100% negative, simply overwhelmed positive comments in other areas. It is also possible that the majority of teacher comments are about mechanics, and thus negative or corrective in nature. Perhaps the issue is less one of positive versus negative than one of the focus of instructor comments, indicating that teachers need to balance mechanical corrections with comments on areas like topic, effort, rhetoric, and structure, which may tend, as Smith found, to be more positive in nature. In addition, teachers must be aware that excessive praise can lead students to believe either that they do not need to improve, or that their papers warrant much higher grades than have been given. A balance must be found between positive comments and suggestions for improvement.

When comments made by students involved in peer review of each other's writing were compared to teacher's comments on the same papers, it was found that the students tended to make more positive comments than the teachers did, and that the teachers were more directive and more focused on form than the student peer reviewers were (Ferris, 1997). Bardine (1999) pointed out that it was important to respond not just as an instructor, but as a reader, noting questions, confusion, or places where the instructor was puzzled about the meaning of the words in the paper. Faulty logic, invalid conclusions,

and missing information should be noted, along with suggestions for improvements and indications of positive aspects of the writing. These indicate not only a positive, but also an instructional tone, with a focus on content over mechanics.

Some students said they wanted more comments on papers, including but not limited to comments about what teachers liked. One student participating in Bardine's (1999) study, though, said that when she received a comment of "good" next to a marked section, it was helpful as an example of positive feedback, but did not necessarily help her to write better. Specific comments about what a student did well appeared to be more appreciated.

Comment Completeness

Finally, comments can be evaluated for completeness, which, though similar to Ferris's (1997) category of length, refers not only to the actual length of the comments, but to how complete and effective students perceive those comments to be. The readers in Lunsford and Straub's (2006) study made a point of providing full and complete comments, generally in complete sentences. The use of symbols, abbreviations, and one-word responses can leave students bewildered and uncertain about what they are being asked to do. At the same time, writing long paragraphs of explanation can be exhausting for instructors with too many students, and too little time. Lengthy comments may also be overwhelming for students.

End comments have been found to be much longer than marginal comments, with 87% of the end comments rated as average or long, whereas a dramatic minority of the marginal comments were similarly identified. This could be in part because the instructor has more space in which to write comments at the end of the paper (Bardine, 1999).

Most teachers believe that the written responses they put on their students' papers are clear and concise, as well as being tightly focused. They assume that students understand those comments, and that if they would only utilize them for future writing, they would be more successful writers. Students, however, do not always agree (Bardine, 1999).

Bardine (1999) observed in classrooms, analyzed comments made on student papers, and followed that analysis with interviews with several students in which Bardine questioned students about their reactions to comments they received on their papers. He wanted to know, he said, what comments they considered helpful and easily understood, and what kind of comments they preferred. Those observations, analyses, and interviews indicated students often did not understand comments made on their papers. In particular, comments that involved symbols or letters, such as "w.c." for word choice, or even "sp" for spelling errors, left students wondering what was intended. In addition, they found that direction to explain further or add more details were too vague and unhelpful in terms of telling the students what they were expected to do. Students found narrowly targeted comments that asked specific questions much more helpful. Students also repeatedly commented that phrases like "awkward opening" may have indicated that something was wrong, but they did not understand exactly what the phrase meant, or how to fix what was wrong. Symbols caused even more confusion, and students explained that a slash through a word did not even help them understand what was wrong. One aspect that should be considered is the need to avoid assuming that students understand symbols, words, and even lengthy comments.

This does not mean that symbols and abbreviations may not be used. Many style guides, including the Publication Manual of the American Psychological Association (2001) and the Modern Language Association Handbook for Writers of Research Papers (Gibaldi, 2003) contain very specific lists of symbols and abbreviations intended for use in grading and commenting on student papers. Many high school and undergraduate students, however, are not completely familiar with the accepted proofreading marks used by many instructors, so the need to be sure students correctly understand those symbols and abbreviations before using them could be important.

One- and two-word comments, like elaborate, be specific, or be precise appear to be well phrased responses, but they did not give the student a clear explanation about what it was that needed to be elaborated upon, or made more specific; nor did they indicate how a student should go about doing that. Students said they needed to see explicit, clearly explained comments that did more than just call attention to a mistake. A truly complete comment, for these students, needed to instruct as well as pointing out errors (Bardine, 1999).

Teachers need to be sure their comments are clear, comprehensive, and specific. They also need to avoid making assumptions about students' familiarity with proofreading symbols. Many students do not know the meaning of those symbols, and markings like arrows, underlining, circles, parentheses, and slashes may not convey the instructor's intended meanings. In addition, teachers sometimes forget that symbols can have different meanings depending on how they are used. A teacher may underline a word or phrase to call attention to errors within it, and later in the same paper underline another word or phrase for a different purpose, such as to show a book or text title

(Bardine, 1999). The purpose of the marking used is different, and students may not be able to keep up with the changes.

Concern about student misinterpretation or misunderstanding of teacher comments led Krol (1998) to design a study that used qualitative research methodologies to examine the way students understood and interpreted instructor comments. To do this, she had students keep a writing journal, and then wrote her comments regarding specific entries on adjoining pages. She also tape recorded her explanation of her intentions with regards to each written comment. Interviews were then conducted with students at the conclusion of the semester, eliciting their responses to the written comments. Krol found that the match between the teacher's intentions and the students' interpretations varied from strong (76%) to weak (39%), and comments with a reflective or dialogue-type pattern had the highest correlation between intention and interpretation. Other comments showed misinterpretation, resistance, boredom, or a lack of response by the students.

In an attempt to evaluate the impact of writing apprehension on students' use of instructor comments, Wiltse (2001) found that students with low writing apprehension levels were more likely to make use of instructor comments related to global issues in the students' writing. However, when students' self-reported levels of self-efficacy were included in the statistical analysis, the results indicated that those students who reported high levels of self-efficacy also reported that they would use global comments from teachers more frequently than those reporting lower levels of self-efficacy. Similarly, students who reported high writing outcome expectations also showed a tendency to make more use of instructors' global comments than those who reported low writing outcome expectations.

Impact of Teacher Comments on Writing Apprehension

Although most teachers intend their comments to be helpful, too often a weak writer, already apprehensive about the task and his or her possibilities of success, may see the paper, whether a revision or a graded final version, as nothing more than an unkind analysis of their writing effort. That student may develop increased apprehension about writing, the opposite of what the instructor intended. Students generally benefit most from instructor comments when they perceive that following the advice and suggestions provided will actually improve their writing performance (Wiltse, 2002). However, as Bardine (1999) found, many students view those comments only as hints about how to get a better grade.

Matthews (2006) conducted research at Macon State College, addressing the question of how much impact, if any, classroom practices had. Using a case study and one class, along with artifacts such as reflective research journals, a course syllabus, lesson plans, descriptions of classroom practices, and samples of students' work, she observed changes in the writing apprehension scores of three major participants. Two initially tested as being apprehensive, and one as non-apprehensive, and all test subjects had post-test Writing Apprehension Scale results that indicated a reduction in apprehension. All three of the study participants also showed indications through classroom observations and interviews, that they had at least begun to view writing more positively than they did at the beginning of the semester. Although this information, while interesting, does not directly confirm Daly's suspicion about teacher comments as the causative agent of student writing apprehension, it does indicate that classroom practices of one kind or another may have an effect on levels of apprehension.

In her evaluation of a much wider sample of instructor comments, Smith (1997) found a strong tendency toward positive comments on papers that had been assigned the full range of grades. That overall trend to make positive comments even on less than stellar papers raises questions about the impact of both positive and negative comments on student writing apprehension, which has not declined since the 1970s.

Daly and Miller (1975a) assumed that writing apprehension was the result of years of negative teacher comments, yet students who have received many positive comments also express apprehension. Is writing apprehension directly affected by teacher comments? Although this seems possible, or even probable, it has not been specifically researched, and the preponderance of positive comments in Smith's (1997) study does raise questions. As Matthews (2006) found, some classroom practices had a positive impact on writing apprehension, but she did not look specifically at comments she made on written work.

If teacher comments do have an impact, what aspects are the most important? What impact does placement of comments have on the perceptions of the students? What impact does the color of the writing implement used by the instructor have on whether comments are perceived in a positive or negative way? What is the relationship between the use of symbols, abbreviations, and other completeness-oriented aspects of teacher comments, and student writing apprehension? This review of the literature summarized much of the research done in the areas of writing apprehension and instructor comments. Clearly, writing apprehension is an issue that can and should be investigated further, and the effect of instructor comments upon that construct can be studied with the hope of

helping those who struggle with writing, and their apprehension about writing, in a never-ending cycle.

Many English instructors have heard students, at the beginning of the semester, claim that they were not good at English (Matthews, 2006). Often, this conviction is based on a high level of writing apprehension. If those students' trepidation was limited to emotional impact, and did not affect their writing performance, instructors could consider it the students' problem. However, since writing apprehension affects student success in writing, it becomes an important teaching issue. How can teachers begin to address the problem? Do their comments on student papers have an effect in and of themselves, and if so, what aspects of teacher comments have the most impact, and in which direction? If the reported impact of writing apprehension on writing success is valid, and if it can be linked to teacher comments, then writing apprehension is very much the instructor's problem, since students who are highly apprehensive clearly do not perform as well as those who are not.

CHAPTER III

METHODOLOGY

This chapter will describe the methodology and procedures used in this research project. The purpose of the study was to determine whether a relationship existed between various types and aspects of instructor comments and the writing apprehension levels of the students who received those comments. The study also examined other correlations among aspects of teacher comments.

Writing apprehension has been shown to have a profound impact on student success in writing (Daly, 1978; Daly & Miller, 1975c), choices of classes (Daly & Miller, 1975b), majors, and careers (Daly & Shamo, 1976; Wiltse, 2006), and even long-term issues of self-esteem, self-perception (Onwuegbuzie, 1999), and expressiveness (Daly & Shamo, 1976). It is for these reasons that determining the extent of any possible relationship between teacher comments and writing apprehension becomes important as a way of exploring possible causative factors. Instructor comments have always been assumed (Daly & Miller, 1975b) to be the primary cause of writing apprehension, especially when students have been subjected to years of negative comments; however, the possible cause-and-effect relationship has received little attention in empirical studies of the phenomenon. In fact, little research has been done into the impact on students of such things as color, instructor penmanship, comment placement, tone, or completeness

of instructor comments, all of which may have some degree of influence on student apprehension.

This research is a quantitative, correlational study. Quantitative research allows a researcher to generalize a finding to a population, or to examine relationships between independent and dependent variables (Creswell, 2005). In addition, this is a cross-sectional study, and participants were surveyed only once.

Survey Instrument

Among the literature reviewed prior to beginning this project were several reports of research (Bardine, 1999; Bardine, Bardine & Deegan, 2000; Ferris, 2001; Fife & O'Neill, 2001; Monroe, 2002; Popovich & Masse, 2005; Wiltse, 2002) concerning comments made by teachers in response to student writing. However, like most research in the field of writing and composition these studies utilized qualitative methodologies with a very limited number of subjects, and were focused primarily on discovering ways in which teacher comments could help students to revise and re-write more effectively. No adequate quantitatively oriented survey instrument was found for use in this project.

In preparing to design the instructor comment survey used, literature (Bardine, 1999; Bardine, Bardine, & Deegan, 2000; Ferris, 2001; Fife & O'Neill, 2001; Monroe, 2002; Popovich & Masse, 2005; Wiltse, 2002) related to instructor comments, and to general student responses to those comments, was reviewed to assist in determining what types and aspects of comments should be investigated. Survey items were then created with the intention of addressing the specific research questions chosen.

For the purposes of this research, the survey instrument was divided into three sections. The first section dealt with demographic information. The second section

covered instructor comments that respondents reported having received in the past, and the third section measured the writing apprehension level of each respondent. (See Appendix B)

Section A—Demographic Information

The demographic section of the survey instrument was intended to provide a clear profile of the target population. It was also used to identify respondents whose backgrounds put them outside of the target population, and to allow for future exploration of other background details that might impact students' writing apprehension levels. In order to do this, the demographic portion of the instrument collected data about the respondents' age, gender, current grade level, grade point average, credit hours carried, family income level, ethnic-racial background, native language, home country, parents' educational background, and the presence or absence of learning disabilities that affected reading or writing.

Section B—Teacher Comment History

Teacher comments were broken into four basic sections: placement, appearance, tone, and completeness. Placement referred to whether comments were written in the margins, close to where there were structural errors or other problems associated with student writing, at the end of the paper, or on a separate sheet of paper. Questions about appearance requested information about the color of writing implement used as well as instructors' penmanship styles, including case, darkness, underlining, typing or electronic transmission, and legibility. To evaluate student perceptions of the tone of comments they had received, students were asked, using a likert-type scale, how often they had received comments with tones that were, respectively, positive, encouraging, negative, impartial,

hostile, resigned, or which sounded like orders, suggestions, instructions, or questions. To enhance clarity, each of the questions regarding tone included a brief example, such as, “Good start, keep working” as an example of encouraging tone. Finally, questions about completeness asked how often students had received comments in the form of symbols, abbreviations, single words, phrases, sentences, and complete paragraphs. In addition, students were asked if they understood the meanings and intentions of comments of varying levels of completeness.

Section C—Writing Apprehension Scale

A Writing Apprehension Scale (WAS) exists, created by Daly and Miller (1975a) which consists of a 26-item likert-type scale that asks students to rate their experiences with writing. This instrument was used in this study, with the written permission of John Daly. Daly and Miller (1975a) initially obtained a reliability rating by a split-half technique. To do that, they compared the top half of the test with the bottom half. The resulting reliability was .910. They further utilized test-retest techniques and determined that the reliability of the WAS over a one-week period was .923.

Further testing of the validity of the Writing Apprehension Scale was conducted by Shaver (1990). After administering the WAS to 354 students in one school district who were in 7th through 10th grades, Shaver analyzed the results. The resulting alpha coefficients were at least .95 for the Writing Apprehension Scale, with higher correlation between this test and holistic writing scores than were found for other similar tests of writing attitudes.

Target Population

For this research project, the target population consisted of two groups of students. The first group included traditional native-English-speaking freshman students enrolled in first-semester college composition classes. Although 249 students were enrolled in the targeted composition courses, only 223 completed the survey tool, and the data from 121 were used, because the remainder were either upper classmen, older than average students, or students for whom English was a second language.

The second target population group ($N = 79$) consisted of seniors who were preparing to graduate with baccalaureate degrees. The Departments of Business, Education, Nursing, Math and Computer Science, and Social Sciences were invited to participate in the second portion of the data gathering process.

All of the students who participated in the study were enrolled at Littletown State University. The University's enrollment during the fall semester of 2008 was 2,730 by head count. This included distance education students, part-time students, and concurrent enrollment students as well as traditional, full-time, on-campus students.

Instrument Design

In an attempt to increase completion rates and decrease the missing data rate of this survey, the questionnaire was given a fairly simple title (Instructor Comment Survey) and limited in length. This was found to increase the response rate (Lund & Gram, 1998) on surveys of a similar type. The paper-and-pencil format, rather than an on-line format, and the administration procedure were also purposely chosen to increase response rate. All freshmen participating in this study completed the survey instrument in the classroom. Furthermore, the Business, Education, and Nursing Departments administered

the survey to seniors who were preparing to graduate in their respective departments during classes specifically targeted at graduating seniors, or at mandatory meetings of graduating seniors. The Department of Math and Computer Sciences, and the Department of Social Sciences, requested that students visit their advisors' offices to complete the survey. Because this was designed as a paper-and-pencil survey, layout was carefully considered, as was wording of the questions. Poorly written questions can lead to confusion on the part of the respondents, compromising the data gathered (Lund & Gram, 1998). Accordingly, care was taken to avoid ambiguity, double questions, and overlapping responses. Questions were constructed and revised in a manner intended to make them straightforward and easy to understand. Additionally, ample white space was provided to avoid an appearance that might have seemed overwhelming or off-putting. Length of the survey was also carefully considered, and the entire instrument was intended to be completed in a maximum of 20 minutes.

Validity

To establish face validity for the questionnaire used in this research, impartial faculty members in the English division of the Language and Literature Department at Littleton State University were asked to examine and evaluate the survey instrument, on the basis of length, clarity, and internal validity. Their input helped to ensure that the questions clearly asked for the desired information. Several professors offered specific suggestions for changes in wording, punctuation, and grouping, as well as the addition of some questions, in an attempt to increase the validity of the survey. Aside from their recommended changes, the members of the Department agreed that the survey was appropriate, and the instrument would elicit the information that was sought.

In addition, a pilot study was conducted with members of a freshman composition class ($N = 19$) at Littletown State University. The students were at a mid-point in the one-semester course. Responding students completed the entire instrument, including the Writing Apprehension Scale, and were asked to comment on any questions they found confusing, poorly stated, or otherwise in need of improvement. Feedback from those students, together with the comments obtained from members of the English faculty, was used to make changes in the questionnaire before research was begun. Because changes were made based on the comments of those two groups, no data from the student respondents in this pilot study were included in the data analysis for this research.

The Writing Apprehension Scale, which was also administered to all respondents, has been widely used since the mid-1970s, and repeatedly tested for validity in measuring the apprehension it was intended to quantify. Although it clearly had at least the appearance of face validity, it was necessary to confirm predictive success in order for the instrument to be considered fully valid. Using 176 subjects, Daly and Miller (1975a) administered the writing apprehension scale at the beginning of a semester. At the end of the semester they then administered another questionnaire on the writing requirements of the respondents' jobs. Using a one-way analysis of variance in writing requirements, and dividing the responses to the WAS into three levels of apprehension, they tested for the differences they had hypothesized. The analysis of variance showed that writing apprehension levels of the individuals tested had a significant impact on communication requirements of the jobs chosen by those participants ($F = 14.78$, $df = 2/173$). The differences between the means were examined using Scheffe's procedure, and individuals whose Writing Apprehension Scale scores indicated that they were highly anxious

reported that their occupations had significantly less written communication requirements than the occupations of those with lower writing apprehension levels, as Daly and Miller (1975a) had hypothesized. There were also significant differences found between the writing requirements of jobs held by those who were perceived to have high anxiety levels, and those whose anxiety was moderate.

Reliability

To show that the scores from the instructor comment survey were consistent and stable, the coefficient alpha was used to test internal consistency of the survey instrument. The statistical analysis provided a coefficient which estimated the consistency of the scores on the instrument at .79. This score indicates that the instructor comment survey is reliable.

Ethics Approval

Appropriate IRB approval was first obtained from Littletown State University, the site of the research. Because Littletown State University's Vice President for Academic Affairs supervises all human research, with the cooperation of his board of advisors, there are no variations or levels of IRB approval. All research projects, including questionnaires, which are generally considered exempt from more stringent overview or the need for participant consent signatures, are required to complete a full review and include a consent form for participant signature. That application was submitted, and approved. Subsequently, approval was sought from the University of North Dakota, which received this dissertation. That IRB approval was also granted.

Data Collection for Freshman Students

For the first part of the research, faculty members in the English division of the Language and Literature Department were contacted in February 2008, at a regularly scheduled department meeting. At that time, they were given draft copies of the research proposal, with a basic schedule for research. Of the nine faculty members, eight immediately agreed to participate. Five were tenured faculty members; of the remainder, one was a non-tenured professor, one a non-tenured lecturer, and one an adjunct instructor. Of those, six were scheduled to teach between one and three sections apiece of Composition I during the fall semester of 2008, for a total of 14 sections.

An e-mail reminder was sent to each faculty member during the last week before school started in August of 2008. Attached to the e-mail were faculty instructions for administering the survey, including the necessity to supervise the reading and signing of the consent form. Specific instructions for instructors and professors to convey to students were also attached. (See Appendices C and D) At the end of the second week of class, the survey had been administered to a total of 13 sections of college composition.

All surveys administered to freshmen were administered during class time, in the classrooms, by the respective professors. Data collection was cross sectional, involving only a one-time response to the three-part questionnaire.

On-campus, face-to-face enrollment in Composition I, the first semester composition course required of all students at Littleton State University, totaled 291. One instructor chose not to participate, and one was unable to administer the questionnaire to one of the three sections she taught, resulting in a total enrollment in participating sections of 249. Of those, 223 students submitted completed questionnaires.

Data Collection for Senior Students

The questionnaire for graduating seniors was administered either by their advisors, under the auspices of the respective department heads, or during the course of classes or meetings required of seniors preparing to graduate. To accomplish this, Chairs of the Departments of Nursing and Education were contacted nearly a year before this research began. Each received a reminder e-mail at the beginning of Fall Semester, 2008, requesting confirmation of their willingness to participate with their departments, and suggesting this researcher's attendance at a departmental meeting in order to explain the details of survey administration. Both confirmed their agreement. Three other departments were also contacted. The Business, Math and Computer Science, and Social Sciences Departments all reported that they had no mechanism in place for advisors to meet with graduating seniors. A meeting is not required of graduating seniors in many departments, and some students complete all of the graduation requirements independently, without consulting with their advisors. However, the Business Department held a class each semester for seniors preparing to graduate. Two on-campus sections of this class were scheduled for spring semester, 2009. The instructor of the two on-campus sections agreed to administer the questionnaire to her classes. In addition, a meeting is held for students preparing to graduate in Education, and the survey was administered to those students at that time. The Nursing Department also administered the survey in a meeting of senior students who were preparing to graduate.

The Math and Computer Sciences Department and the Social Sciences Department brought the issue up in their regularly scheduled department meetings, and reported that their faculty members were willing to administer the questionnaire to as

many graduating seniors as they met with during January and February of 2009. Though this made the number of students participating slightly less predictable, it still provided an adequate number (N=79) of respondents in the target group.

The faculty instructions and student instructions provided for freshman composition classes were adapted and provided for all of the instructors involved in administering the questionnaire to graduating seniors. Printed copies of the entire survey instrument, together with the appropriate Scantron forms, and pencils, were also made available. (See Appendices E and F)

Data Preparation for Freshman Group

Questionnaires for both groups were evaluated for inconsistencies and missing data. Responses showing the respondent(s) to be other than the grade level sought (i.e., non-freshmen taking the freshman composition course, or non-seniors in the graduating senior group) were not used.

Of the 249 students in the Composition I sections surveyed, 223 completed the survey. Of those, 85 were sophomores, juniors, or seniors, and their responses were deleted to avoid contamination by responses reflecting college teachers' comments, rather than those of high school teachers. An additional 15 freshman students reported being 20 years of age and over. Those students' responses were also deleted, to avoid contamination of responses due to uncertain recollections over time, reducing the number of respondents to 123. Two cases showed the respondents to be international students for whom English was a second language. Those were also deleted, resulting in a data set of 121 cases, all reflecting information provided by students who were between the ages of 17 and 19, freshmen, and native English speakers. These results are shown in Table 1.

Table 1. Breakdown of Data Cleaning Processes for Freshman Respondents.

	included	Deleted
Total responses	223	
upper classmen		85
Students older than 19		15
Non-native English speakers		2
Remaining valid responses	121	

Questionnaires that had missing responses for more than three questions on the Writing Apprehension Scale were considered invalid, and inappropriate for inclusion in the study due to the fact that an incomplete Writing Apprehension Scale made examination of the relationship between teacher comments and writing apprehension impossible. After the data were cleaned, however, no incomplete questionnaires were found among the freshman respondents' cases. Other missing data were found to be rare, and of little impact on the results of the study. Four freshmen failed to complete the question about family income. Two did not respond to the question about parental education levels. Two freshmen did not complete the question about the existence of a learning disability that affected reading or writing. Those data were collected only to establish a data bank for use in future analysis and were not essential for this study. Only six missing values were found among the questions dealing with writing apprehension or aspects of teacher comments, and no individual respondent showed more than two missing values in those areas. No specific question dealing with either instructor comments or writing apprehension had more than one missing value.

Descriptive statistics were run for each question for which data were missing. Those missing values were then replaced by the mean response for each respective question. According to Cresswell (2005) replacing as much as 15% of data, when it is missing, with such an average will not alter the overall results of statistical analyses

Data Preparation for Graduating Seniors

Data preparation for senior students preparing to graduate was handled in a slightly different manner. A total of 83 seniors responded to the survey. Of those, two respondents had not completed any portion of the Writing Apprehension Scale, and so their responses were deleted. A third respondent had a total of fifteen missing responses, in a random pattern. All three of these incomplete surveys were dropped before the data were analyzed.

Because the responses of graduating seniors were gathered in order to examine student perceptions of various aspects of teacher comments during those students' college years, less data cleaning was necessary. All of the students who submitted surveys were seniors. Any non-seniors' responses would have been deleted, but none existed. In this target population, the age of the respondents was not a barrier to clear recollection of college experiences, since regardless of age, they were currently college students. In addition, since all students were completing degrees at Littleton State University, native language and home country were not considered to be barriers to accurate reporting. Because of these factors, only the three incomplete surveys were deleted.

Missing values among this target population were addressed in the same manner as for freshmen. Three students failed to complete the question about student income. Two did not respond to the question about ethnicity. No other questions had more than

one missing value. In those cases, descriptive statistics were run, and the mean was substituted for the missing value.

Data Analysis

All data were entered, coded, and verified by hand checking for inappropriate responses, such as a response of “D” for a question with only two response options. This type of error occurred frequently in one senior student’s response. That response was deleted. Staff members in Littleton State University’s Computer Services Department assisted in data entry for both the freshman and senior groups, by loading data from the completed Scantron forms into an Excel program prior to placing it on a 2 gigabyte flash drive. Questions had been designed to be coded as numerical responses rather than as words or phrases. For example, students were asked to indicate in which age group they belonged. All data were recoded from the alphabetic responses shown on the Scantron form into numerical responses.

The Writing Apprehension Scale required particular re-coding attention, because it was designed to be hand-scored, with comments indicating positive feelings about writing being subtracted, and comments indicating negative feelings about writing being added. However, for purposes of statistical analysis, these responses were re-coded so that a high score on any question indicated apprehension, while a low score indicated confidence. As a result of this re-coding procedure, the scores could be added in the statistical program, to produce a meaningful overall writing apprehension score. The sum of the responses was entered into the data set for use in correlation procedures.

The demographic data were analyzed first, and frequencies determined, so that the target population could be described in terms of all the variables applied, including age,

gender, grade point average, credit hours, family income level, ethnic background, home country, parents' educational background and presence or absence of a learning disability that affected the respondent's ability to read and write. Because cases involving upper classmen, older-than-average students, and international students for whom English was a second language were deleted from the freshman data, those demographic details were not included. All responses included in that portion of the data analysis were from freshman students, less than 20 years old, for whom English was the native language.

Among the seniors, however, only cases with excessive missing values or inappropriate responses were deleted. For that reason, more demographic data were analyzed for that group.

Data from the Instructor Comment Survey were compared with the results of the Writing Apprehension Scale using a series of correlation tests, to examine relationships between specific types and aspects of instructor comments and the Writing Apprehension Scale. Additionally, the results of some specific questions were compared to results of others, to determine, for example, whether the color of ink used showed any relationship with the students' perceptions of instructor hostility as evidenced by students' reported perceptions of comment tone.

All statistical calculations were performed on a personal computer using the software SPSS for Windows, version 16.0. Tables and charts were generated by that program and transferred into Word for Windows.

Research questions have been identified for this study. The resulting hypotheses can be stated as follows:

1. Placement of faculty comments, i.e., in the margins, at the end of a paper, close to where there are structural or other issues associated with sections of students' work, or on a separate page, has a statistically significant effect on how the comments themselves are interpreted and perceived by students.
2. Student perceptions of faculty comments are affected to a statistically significant degree by the appearance of the comments, as determined by the writing implement used, whether pen (i.e., black, red, green, or purple), pencil, or typed (if provided on a separate page), and by faculty penmanship styles, i.e., uppercase, mixed case, lowercase, underlined, dark/light, and legible/illegible.
3. There is a statistically significant relationship between the use of comment marks such as symbols, abbreviations (i.e., frag., tr., sp.), single words, phrases, complete sentences, and explanatory paragraphs, and student perceptions of teacher criticism.
4. Student writing apprehension has a statistically significant correlation with various comment tones (encouraging, negative, impartial, hostile, or resigned).
5. These four aspects of teacher comments show statistically significant correlations with student writing apprehension levels, as demonstrated by the results of the Writing Apprehension Scale.

Data from the survey instrument were used to respond to those questions, as well as to explore the relationship between other aspects of teachers' comments and students' attitudes and writing apprehension levels.

CHAPTER IV

RESULTS

The purpose of this research was to explore the possibility of relationships between various aspects of teachers' comments and student writing apprehension levels, as well as other aspects of students' emotional responses to specific elements of the comments. The target population consisted of two groups: First, data were collected from freshmen enrolled in Composition I during the fall semester of 2008 by administering a three-part survey to them; then, in the first half of spring semester of 2009, seniors preparing to graduate in the departments of Business, Education, Math and Computer Science, Nursing, and Social Sciences were given the opportunity to participate by completing the same survey.

Freshman Demographics

A total of 121 cases were analyzed for the freshman group. Of those, 97.5% (N = 118) were 18 or 19 years old, and 2.5% (N = 3) were 17 years old. Male students made up 52.1% (N = 63) of the group, and 47.9% (N = 58) were female. Self-reported grade point averages showed a wide range, with the majority, 67.8% (N = 82) reporting high school grade point averages ranging from 3.0 to 3.9. An additional 24% (N = 29) reported high school grade point averages in the 2.0 to 2.9 range. Only .8% (N = 1) reported a grade point average of 1.0-1.9, while a surprising 7.4% of the student respondents (N = 9) reported grade point averages of 4.0 and above. In modern high schools, students who

take advanced placement or honors classes are often awarded grades higher than a 4.0 to reflect the increased difficulty of those classes, although the maximum grade possible varies between high schools (<http://www.lahainanews.com/story.aspx?id=9108>; <http://www.insidehighered.com/news/2005/04/05/covenant>).

The majority of the freshman respondents were full-time students. That status requires that undergraduate students enroll in and complete a minimum of twelve credit hours, and 31.4% (N = 38) of the respondents reported that they carried 12 to 15 credit hours, while 66.9% (N = 81) reported a course load of 16 to 20 credit hours. Only .8% (N = 1) had fewer than 12 credit hours, and an equal number (N = 1) were enrolled in classes totaling more than 20 credit hours.

Family income also varied, with 13.2% (N = 16) reporting a family income below \$20,000. An additional 23.1% (N = 28) of student respondents reported family income of \$20,001 to \$30,000 per year, while 14% (N = 17) claimed an income of \$30,001 to \$40,000 per year. The next category, \$40,001 to \$50,000 was reported by 15.7% (N = 19) of the students surveyed. The mode however, was clearly in the “more than \$50,000” category, which was reported by 33.9% (N = 41) of the students included in the data analysis.

Information about ethnicity was also requested, and the relationship between ethnicity and writing apprehension may be explored in future research. Because North Dakota is predominantly Caucasian (US Census Bureau, 2008), it was no surprise that 86% (N = 104) of the freshman students included in this survey were Caucasian. An additional 5% (N = 6) were African American. This particular statistic was surprising, since only about .8% of the state’s population is African American (US Census Bureau,

2008), and the five largest universities in the state have an African American student population ranging from .9% to 2.3%. Even in the area surrounding Littletown State University, these data represent an anomaly, because Littletown has an African American or black population that totals about .3% of the total population (North Dakota Colleges, 2003).

Other ethnic groups represented included Asian Americans, who made up 1.7% (N = 2) of the students surveyed, Native Americans, at 2.5% (N = 3), and Hispanic or Mexican American students, at 5% (N = 6). Figure 1 illustrates the ethnic make-up of the freshman respondents in this research project.

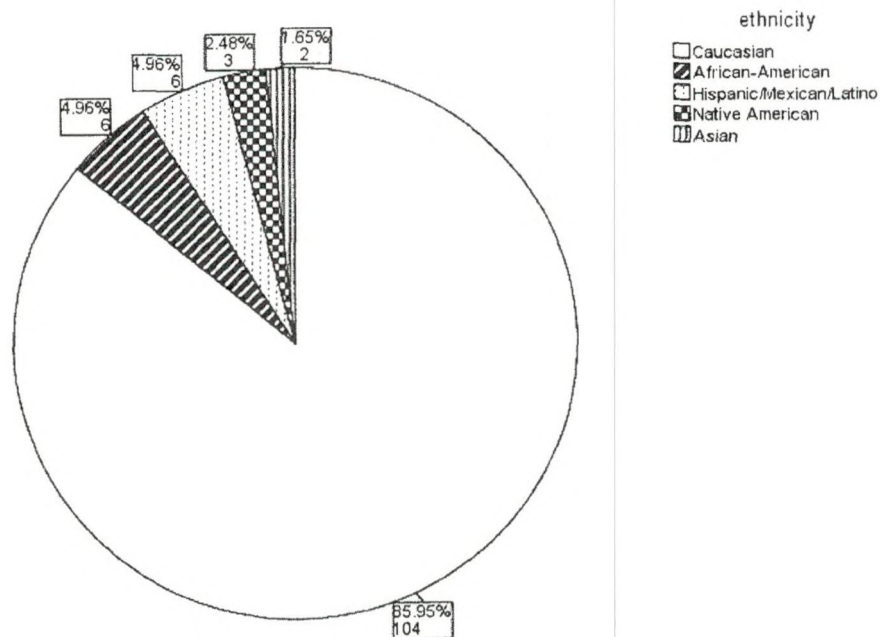


Figure 1. Ethnicity of freshman respondents.

Given that the states from which Littletown State University's students are drawn are very rural areas, it was surprising that 52.1% (N = 62) of the students surveyed

reported that one or both of their parents had completed college. Another 33.9% (N = 42) indicated that their parents had both completed high school. Graduate school had been completed by one or both parents of 14.9% (N = 18) of students. This is a slightly higher educational level than this researcher had initially expected, based on the extremely rural nature of the area.

Of the 121 cases included in the data analysis of freshman students, only 4.1% (N = 5) reported having been diagnosed with a learning disability that affected reading and/or writing. Another 1.7% (N = 2) indicated that they had been told they had such a learning disability, but had never been tested or officially diagnosed. The vast majority, 94.2% (N = 114) reported that they did not have any reading- or writing-related learning disabilities.

Descriptive statistics were also run for writing apprehension, as measured by total scores on the Writing Apprehension Scale. With 121 freshman cases, and a possible range from 26 (*very confident and non-apprehensive*) to 130 (*extremely anxious*) a range of scores is to be expected. In this group of freshman subjects, the mean score was 75, with a standard deviation of 16. Scores were negatively skewed. The lowest score was 32, the mode was 70, and the highest score was 109. Figure 2 shows the distribution of writing apprehension scores over the population on an individual basis. When the individual scores are divided into five category groups, including very high, high, moderate, low, and very low scores, a more distinct picture of the distribution is provided, as demonstrated in Figure 3.

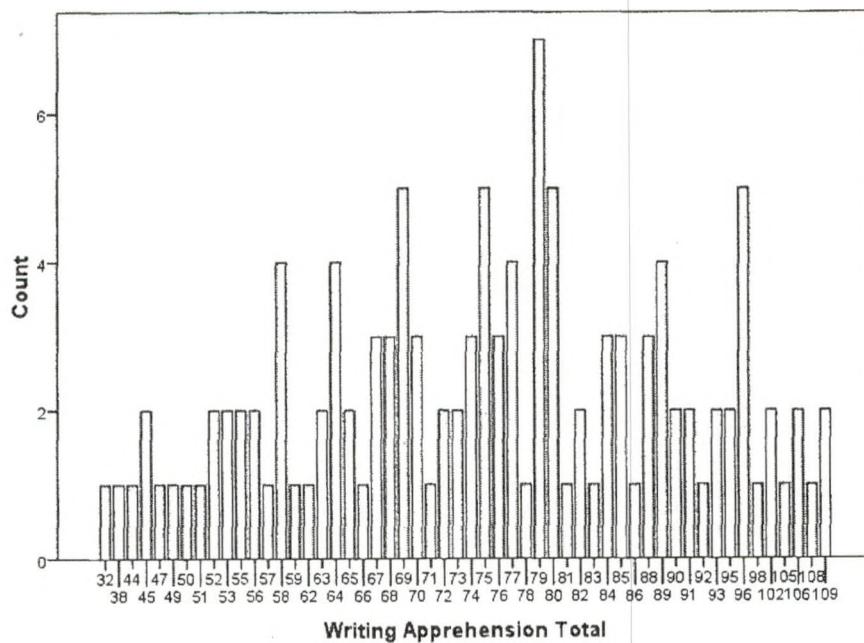


Figure 2. Distribution of individual writing apprehension scores for freshman respondents.

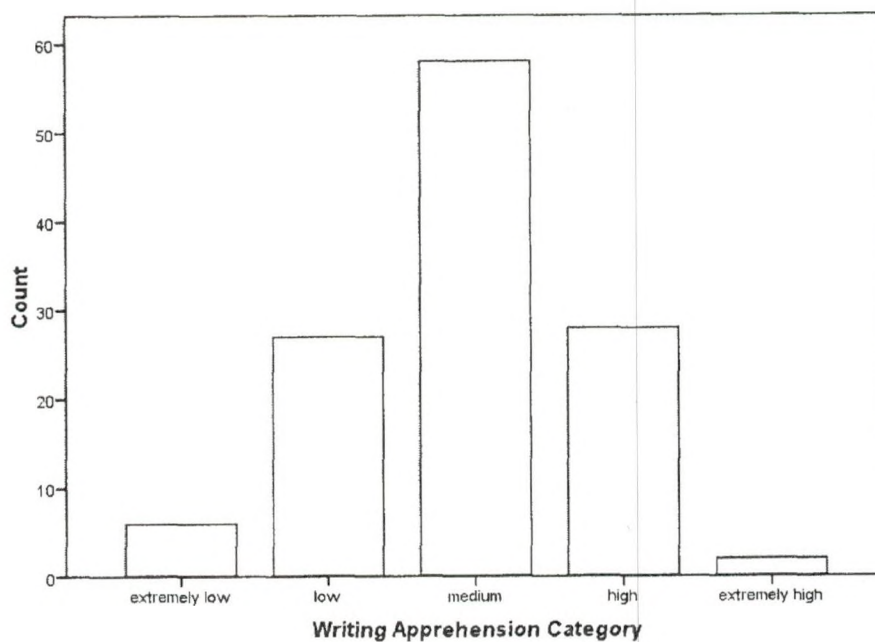


Figure 3. Distribution of writing apprehension scores by category for freshman respondents.

Senior Demographics

A total of 79 cases were analyzed for the seniors preparing to graduate. Of those, 41.8% (N = 33) were between 20 and 22 years of age. Another 39.2% (N = 31) were 23 to 25 years old. While 13.9% (N = 11) were 26 to 30 years old, only 5.1% (N = 4) were over 30 years of age. Male students made up 27.8% (N = 22) of the students responding to the survey, and 72.2% (N = 57) were female. Self-reported grade point averages showed a slightly narrower range than was seen among freshman respondents, with the majority, 79.7% (N = 63), reporting a grade point average of 3.0 to 3.9. An additional 11.4% (N = 9) reported grade point averages of 2.0 to 2.9, with only 1.3% (N = 1) reporting a grade point average of 1.0 to 1.9, an understandable result since students with grades in this range or lower are generally placed on academic probation and not approaching graduation. Only 7.6% (N = 6) of the responding seniors reported a grade point average of 4.0 or above. Since Littleton State University does not award grades above 4.0, these students apparently had 4.0 grade point averages.

The majority of the senior students surveyed were full-time students, completing a minimum of 12 credit hours in the semester during which they were surveyed. Although 35.4% (N = 28) were enrolled in 12 to 15 credit hours, an additional 43.0% (N = 34) reported a course load of 16 to 20 credit hours during the current semester. A few students, 11.4% (N = 9) actually reported being enrolled in more than 20 credit hours. This is a much higher percentage of students with a course load of this size than was seen with the freshman respondents. It may be that these senior students, being close to graduation, chose to take more classes than average in order to finish their degrees by their target date, rather than enrolling in another semester of classes. Conversely, 10.2%

(N = 8) of the students carried less than 12 credit hours, making them officially part-time students. This may have been their alternative solution to the need to complete necessary classes in order to graduate.

Family income varied, with 19.0% (N = 15) reporting family incomes below \$20,000, and 17.7% (N = 14) reporting \$20,001 to \$30,000. An additional 24.1% (N = 19) showed family income of \$30,001 to \$40,000. In the higher income ranges, 3.8% (N = 3) claimed a family income of \$40,001 to \$50,000, while the largest portion, 35.4% (N = 28) reported an income of more than \$50,000. These income levels are similar to the income levels of the freshman students.

Information about ethnicity was requested of this group as well, and the predominance of students of Caucasian descent was again unsurprising, as 86.1% (N = 68) indicated that they were Caucasian. The next most frequent ethnic identity was Asian, with 5.1% (N = 4) of the students. Native Americans and Hispanic or Mexican-American students were present in the same numbers, and 3.8% (N = 3) of the senior students reported membership in those two groups, respectively. African American students were the least common in this group, with only 1.3% (N = 1) found to be present. This information is shown in Figure 4. The very small number of African American students is surprising, in view of the fact that a higher percentage, 5% (N = 6) of the freshman group was African American. This reduction in the percentage of African American students between the freshman and senior years is troubling. These data are shown in Figure 4.

Although students from countries other than the United States and Canada, as well as students for whom English was a second language, were not included in the data

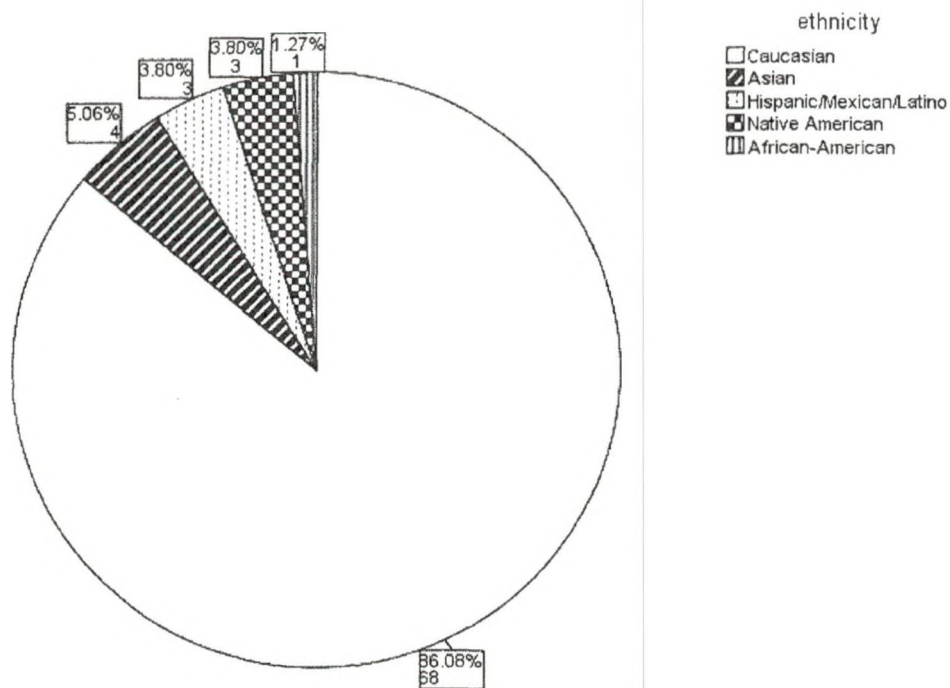


Figure 4. Ethnicity of senior respondents.

analysis of freshman students, they were included in the analysis of the data from the senior group. Because they were included in the group of seniors preparing to graduate, it was interesting to note that although 86.1% (N = 68) of these graduating seniors were, in fact, from the United States or Canada, an impressive percentage of 13.9% (N = 11) were international students. Further, although English was the native language of 87.3% (N = 69), it was the second language for 12.7% (N = 10) of the senior respondents.

When these students were asked about their parents' educational levels, 44.3% (N = 35) reported that their parents had only a high school education. An additional 43.0% (N = 34) reported that one or both of their parents had completed college, while 12.7% (N = 10) indicated that one or both of their parents had obtained a graduate degree.

Of the 79 cases analyzed in this portion of the research, 1.3% ($N = 1$) indicated that they had been officially diagnosed with a learning disability that affected reading or writing. Another 1.3% ($N = 1$) reported that they had been told they had such a disability, but had never been officially tested or diagnosed. The vast majority, 97.5% ($N = 77$) of graduating seniors reported that they did not have any learning disability that affected their ability to read or write.

Descriptive statistics were also completed for writing apprehension levels, providing a mean score of 73, with a standard deviation of 19. Scores were negatively skewed. This group reported a minimum score of 30 and a maximum of 127. Figure 5 shows the distribution of writing apprehension scores. When the scores were divided into categories, ranging from very low to very high, a clearer image of the distribution is shown, as seen in Figure 6.

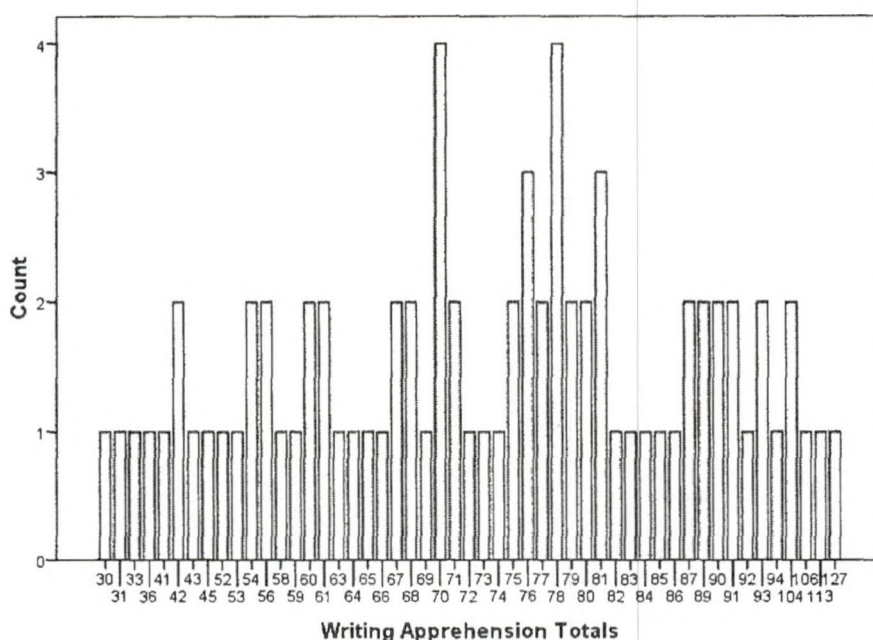


Figure 5. Distribution of individual writing apprehension scores for senior respondents.

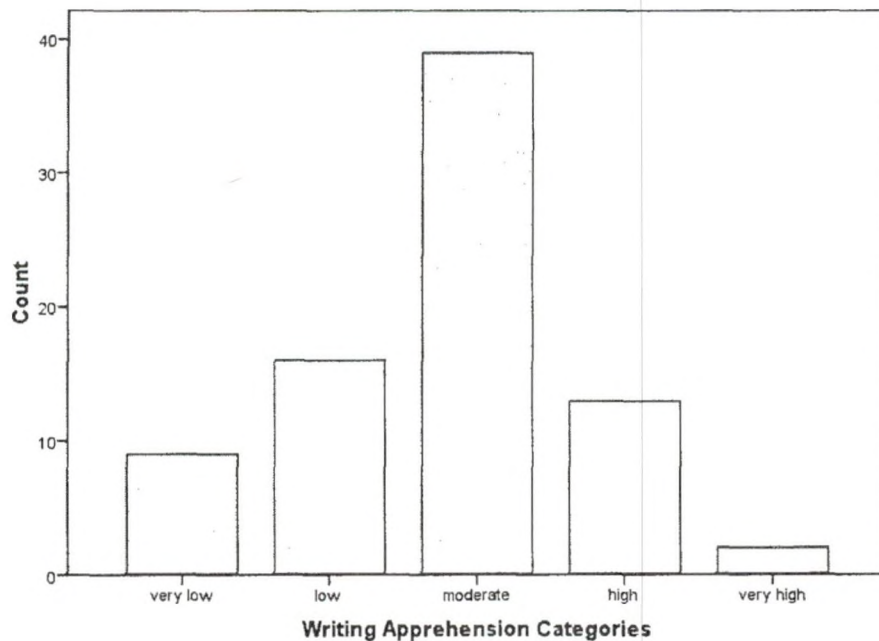


Figure 6. Distribution of writing apprehension scores by category for senior respondents.

A final piece of information requested of senior respondents was the major in which they were graduating. Of the 79 seniors for whom data was analyzed, 36.7% ($N = 29$) were business majors. Another 36.7% ($N = 29$) of the senior students were education majors. An additional 25.3% ($N = 20$) were nursing majors preparing to graduate with a bachelor, not an associate, degree. Finally, 1.3% of the students ($N = 1$) were social science majors. These data are shown in Table 2.

Several issues in this area are worthy of note. First, the Departments of Business, Education, and Nursing were chosen primarily because they were the largest departments in terms of annual graduation numbers at Littletown State University. An attempt was made to include graduating seniors from the Department of Social Sciences, and the Department of Math and Computer Sciences. Because neither of those departments had

Table 2. Declared Major of Senior Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Business	29	36.7	36.7	36.7
Education	29	36.7	36.7	73.4
Nursing	20	25.3	25.3	98.7
Social sciences	1	1.3	1.3	100.0
Total	79	100.0	100.0	

any classes targeted specifically at graduating seniors, information could be gathered only by administering the survey in a one-on-one situation, when senior students met with their advisors. However, neither of these departments had any requirement for a formal meeting between graduating seniors and their advisors. Response rates under these circumstances were very low, and were further impacted by the failure of some students in those departments to complete the survey in its entirety.

The result of this limited range of departmental involvement was that students were drawn primarily from the College of Education, Business, and Applied Sciences, with minimal involvement from students in the College of Arts and Sciences. Any generalization of the findings of this project, particularly with regards to data drawn from seniors preparing to graduate, must therefore take into account the possibility that responses are skewed by the narrow range of majors of the senior respondents.

The independent variables for this research consisted of the aspects of teacher comments about which students were questioned. These included multiple questions about comment placement, appearance, tone, and completeness. The dependent variable was the writing apprehension scores of the individual respondents. Relationships between

individual aspects of teacher comments and the respondents' total writing apprehension scores were examined, as well as other relationships that related to the research questions.

Comment Placement

The first research hypothesis was that placement of faculty comments, i.e., in the margins, at the end of the paper, close to where there are structural or other issues associated with the students' work, or on a separate page, has a statistically significant effect on how the comments themselves are interpreted and perceived by students. The null hypothesis for this research question was that placement has no impact on how comments are interpreted or perceived by the students.

Among freshman students, a statistically significant negative correlation ($r = -.23$, $p < .01$) was found between comments placed in the margins and comments perceived as hostile, as well as between comments placed at the end of the paper and hostile comment tone ($r = -.21$, $p < .05$). A stronger statistically significant positive correlation ($r = .35$, $p < .01$) was found between comments placed on a separate piece of paper and student reports of receiving hostile comments.

Some comment placements, however, were correlated with positive tone. For example, comments at the end of the paper showed a significant correlation ($r = .23$, $p < .05$) with positive comment tone. Comments placed on a separate paper, however, had a significant negative correlation ($r = -.27$, $p < .01$) with positive comments, confirming the trends noted earlier for comments on a separate page to be perceived as more hostile, and thus less positive, than others, while comments at the end of the paper were perceived as less hostile and more positive. Table 3 shows those correlations.

Table 3. Correlation Between Comment Placement and Comment Tone for Freshmen Respondents.

		Positive	Hostile
In margins	Pearson Correlation		-.23**
	Sig. (2-tailed)		.01
End of paper	Pearson Correlation	.23*	-.21*
	Sig. (2-tailed)	.01	.02
Separate paper	Pearson Correlation	-.27**	.35**
	Sig. (2-tailed)	.00	.00

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Although no statistically significant correlations were found in the freshman students' responses to questions regarding placement of comments, and a resigned, encouraging, or negative (as opposed to hostile) tone, there were either positive or negative correlations in the specific areas mentioned. Thus, the null hypothesis was disproved for freshman students.

Among senior students, a statistically significant correlation ($r = .25$, $p < .05$) was found between comments placed in margins and those perceived as impartial, as well as between comments placed at the end of the paper and both encouraging ($r = .38$, $p < .01$) and impartial comment tones ($r = .30$, $p < .01$). Similar statistically significant correlations were found between comments placed on a separate paper and those perceived as encouraging ($r = .29$, $p < .05$) and impartial ($r = .25$, $p < .05$). A final set of statistically significant correlations was found between the mere fact that instructor comments were present on student papers and both impartial ($r = .25$, $p < .05$) and

Table 4. Correlation Between Comment Placement and Comment Tone for Senior Respondents.

		Encouraging	Impartial	Resigned
Margins	Pearson Correlation		.25*	
	Sig. (2-tailed)		.03	
End of paper	Pearson Correlation	.38**	.30**	
	Sig. (2-tailed)	.00	.01	
Separate paper	Pearson Correlation	.29*	.25*	
	Sig. (2-tailed)	.01	.03	
Comments present	Pearson Correlation		.25*	-.38**
	Sig. (2-tailed)		.03	.00

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

resigned tones ($r = .38$, $p < .01$). No statistically significant correlations were found between any aspects of comment placement and positive, negative, or hostile comment tones among these senior respondents. These correlations are shown in Table 4. The null hypothesis was also disproved for the seniors.

Comment Appearance

The second research hypothesis was that student perceptions of faculty comments varied to a statistically significant degree based on the appearance of the comments, as determined by the color of writing implement used (i.e., black, red, green, or purple), whether comments were hand-written, typed, or electronically transmitted, and by faculty penmanship styles such as uppercase, mixed case, lowercase, underlined, dark, light, legible, or illegible penmanship. The null hypothesis was that student perceptions of faculty comments did not vary based on the appearance of those comments.

An examination of student reports of the tones of various types of comments they received is one way to explore student perceptions of those comments. Comment tones explored in this research included resigned, encouraging, positive, negative, impartial, and hostile tones, as well as comments that sounded like orders, instructions, suggestions, and questions, respectively. All of the aspects of comment appearance listed were examined for possible correlation with each comment tone included. For the sake of simplicity, issues of appearance were divided. In recent years, a great deal of attention has been given to the color of writing implements used to write comments on student papers. Therefore, that issue was examined independently of other appearance issues.

The results of the statistical analysis of data received from freshmen showed a significant negative correlation between green pen or pencil and positive comment tone ($r = -.22, p < .05$). Comments written in purple pen or pencil were found to have significant correlations with comments that had a negative tone ($r = .20, p < .05$). the use of some writing implements showed statistically significant correlations with hostile tone. For example, comments made in lead pencil showed a significant correlation ($r = .30, p < .01$) with hostile tone, as did green pen or pencil ($r = .40, p < .01$), purple pen or pencil ($r = .22, p < .05$), and other colors of pen or pencil ($r = .24, p < .01$). In addition, green pen or pencil showed a negative correlation ($r = .22, p < .05$) with positive comment tone, and purple pen or pencil showed an additional correlation ($r = .20, p < .05$) with negative comment tone. Red pen or pencil did not show any statistically significant correlations with any specific comment tones. Table 5 shows the correlations found between the color of writing implement used and the perceived tones of those comments for freshmen.

The statistical analysis of the data indicated that responses received from senior students who were preparing to graduate were slightly different from those received for freshman students. A statistically significant negative correlation ($r = -.26, p < .05$) was found between comments written in lead pencil and an impartial tone. In addition, comments written in purple pen or pencil showed a statistically significant correlation with both encouraging comment tone ($r = .23, p < .05$) and hostile comment tone ($r = .27, p < .05$), demonstrating a dichotomy of reactions to the use of that color. Pen and pencil colors other than those specified (black, red, purple, or green) showed statistically significant correlations with both impartial comment tone ($r = .31, p < .01$) and hostile comment tone ($r = .24, p < .05$). Interestingly, in this target population, red pen shows not only statistically significant negative correlations with comments perceived as resigned ($r = -.27, p < .05$), but also a statistically significant correlation with positive comment tone

Table 5. Correlation Between Comment Appearance Based on Color and Comment Tone For Freshman Respondents.

		Positive	Negative	Hostile
Lead pencil	Pearson Correlation			.30**
	Sig. (2-tailed)			.00
Green pen/pencil	Pearson Correlation	-.22*		.40**
	Sig. (2-tailed)	.02		.00
Purple pen/pencil	Pearson Correlation		.20*	.22*
	Sig. (2-tailed)		.03	.02
Other pen/pencil	Pearson Correlation			.24**
	Sig. (2-tailed)			.01

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

($r = .23$, $p < .05$). Future research might focus on any differences that appear between the responses of senior students of varying departments and majors. These correlations are shown in Table 6.

Table 6. Correlations Between Comment Appearance Based on Color and Comment Tone for Senior Respondents.

		Positive	Encouraging	Impartial	Hostile	Resigned
Lead pencil	Pearson Correlation			-.26*		
	Sig. (2-tailed)			.02		
Red pen/pencil	Pearson Correlation	.23*				-.27*
	Sig. (2-tailed)	.04				.02
Purple pen/pencil	Pearson Correlation		.22*		.24*	
	Sig. (2-tailed)		.05		.03	
Other pen/pencil	Pearson Correlation			.31**	.24*	
	Sig. (2-tailed)			.01	.04	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The remaining aspects of appearance of teacher comments were also statistically analyzed to look for relationships between each specific aspect and the various comment tones discussed. Among the freshman respondents, typed or electronically transmitted comments showed a statistically significant correlation ($r = .49$, $p < .01$) with hostile comment tone, as did comments written in light lettering ($r = .47$, $p < .01$) and illegible comments ($r = .27$, $p < .01$). Comments written in mixed case lettering, as opposed to entirely uppercase or lowercase lettering showed a statistically significant negative correlation with hostile tone. Both underlined comments ($r = .27$, $p < .01$) and lightly lettered comments ($r = .26$, $p < .01$) showed statistically significant correlations with negative comment tone. One of the few relationships found among freshman respondents

between any aspect of teacher comments and a resigned tone was found here, when lightly lettered comments showed yet another statistically significant correlation ($r = .30$, $p < .01$) with comments perceived as resigned.

Two aspects of teacher comments showed statistically significant negative correlations with positive comment tone. The first was lightly lettered comments ($r = -.23$, $p < .01$), followed by illegible comments ($r = -.32$, $p < .01$). In addition, dark lettering was found to have a statistically significant correlation ($r = .27$, $p < .01$) with impartial comment tone, another perceived tone which rarely showed any correlation with any aspect of instructor comments among freshmen. These correlations are detailed on Table 7. Among freshman respondents, no other correlations were found between the

Table 7. Correlation Between Comment Appearance Other Than Color and Comment Tone For Freshman Respondents.

		Positive	Negative	Impartial	Hostile	Resigned
Typed/electronic	Pearson Correlation				.49**	
	Sig. (2-tailed)				.00	
Mixed case	Pearson Correlation				-.20*	
	Sig. (2-tailed)				.03	
Underlined	Pearson Correlation		.27**			
	Sig. (2-tailed)		.00			
Light lettering	Pearson Correlation	-.23**	.26**		.47**	.30**
	Sig. (2-tailed)	.01	.00		.00	.00
Dark lettering	Pearson Correlation			.27**		
	Sig. (2-tailed)			.00		
Illegible	Pearson Correlation	-.32**			.27**	
	Sig. (2-tailed)	.00			.00	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

appearance of comments, and student perceptions of the tone of those comments. The data for senior respondents indicated that there was a statistically significant ($r = .35, p < .01$) correlation between typed comments and negative comment tone. Statistically significant correlations ($r = .28, p < .05$) were also found between lightly lettered comments and hostile comment tone, as well as between illegible comments and hostile comment tone ($r = .26, p < .05$).

Table 8. Correlation Between Comment Appearance Other Than Color and Comment Tone for Senior Respondents.

		Negative	Impartial	Hostile	Resigned
Typed/electronic	Pearson Correlation	.36**			
	Sig. (2-tailed)	.00			
Uppercase	Pearson Correlation				.27*
	Sig. (2-tailed)				.02
Mixed case	Pearson Correlation		.23*		-.31**
	Sig. (2-tailed)		.04		.01
Cursive	Pearson Correlation				-.23*
	Sig. (2-tailed)				.04
Light lettering	Pearson Correlation			.28*	
	Sig. (2-tailed)			.01	
Legible	Pearson Correlation				-.31**
	Sig. (2-tailed)				.01
Illegible	Pearson Correlation			.26*	
	Sig. (2-tailed)			.02	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Interestingly, among senior respondents, a number of statistically significant correlations were found between various aspects of comment appearance and resigned comment tone, a result that was not found among the data from freshman respondents. Only one of these was a positive correlation, however. That was the use of uppercase lettering ($r = .27, p < .05$).

Statistically significant negative correlations were found between resigned comment tone and mixed case lettering ($r = -.30, p < .01$), cursive writing ($r = -.23, p < .05$), and legible handwriting ($r = -.31, p < .01$). Since statistically significant correlations were found, the null hypothesis was disproved. These results are shown in Table 8.

Comment Completeness

The third research hypothesis was that a statistically significant relationship would be found between the completeness of comments, as indicated by the use of comment marks such as symbols, abbreviations, (i.e., frag., tr., sp.), single words, phrases, complete sentences, and explanatory paragraphs, and student perceptions of teacher criticism. The null hypothesis was that completeness of comments would have no effect on those perceptions.

One way to examine student reactions to varying levels of completeness in teacher comments is to correlate the various levels of completeness with the tones students identified as tones of comments they have received. A statistically significant correlation was found between comments that used symbols, and an encouraging tone ($r = .22, p < .05$). A statistically significant negative correlation was found between abbreviations and a positive tone ($r = -.20, p < .05$). In this case, the finding actually

suggests that the more often students found comments using abbreviations, the less often they reported receiving comments with a positive tone, indicating that students may have found abbreviations to be less positive in tone than other types of comments. One interesting finding was the correlation between phrases and both positive comment tone ($r = .21, p < .05$) and negative tone ($r = .27, p < .01$). The fact that the correlation was stronger with negative tone does raise questions. The correlation ($r = .34, p < .01$) between comments presented as sentences and negative comment tone was the strongest of all, while paragraphs showed a strong statistically significant ($r = .25, p < .01$) correlation with a resigned comment town. Table 9 shows these correlations.

Table 9. Correlations Between Completeness of Instructor Comments and Comment Tone for Freshman Respondents.

		Positive	Encouraging	Negative	Resigned
Symbols	Pearson Correlation		.22*		
	Sig. (2-tailed)		.02		
Abbreviations	Pearson Correlation	-.20*			
	Sig. (2-tailed)	.03			
Phrases	Pearson Correlation	.21*		.27**	
	Sig. (2-tailed)	.02		.00	
Sentences	Pearson Correlation			.34**	
	Sig. (2-tailed)			.00	
Paragraphs	Pearson Correlation				.25**
	Sig. (2-tailed)				.00

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

No correlation was found between any aspects of completeness and student perceptions of those comments as impartial or hostile, among the data from freshman

respondents. However, because there were other statistically significant correlations within the scope of this research question, the null hypothesis was disproved for freshman respondents.

Among senior respondents, a number of interesting correlations were found. First, a statistically significant negative correlation ($r = -.23$, $p < .05$) was found between the use of abbreviations and a positive tone, indicating that the more frequently abbreviations were used in teacher comments, the less likely the students receiving those comments were to perceive comment tone as positive. Statistically significant correlations were also found between one-word comments and impartial comment tone ($r = .25$, $p < .05$) and between phrases used as comments and impartial tone ($r = .28$, $p < .05$). However, both one-word comments ($r = .23$, $p < .05$) and paragraph-long comments ($r = .28$, $p < .05$) showed statistically significant correlations with hostile comment tone. These correlations are shown in Table 10. The null hypothesis was disproved for both groups of respondents.

Table 10. Correlation Between Completeness of Instructor Comments and Comment Tone for Senior Respondents.

		Positive	Impartial	Hostile
Abbreviation	Pearson Correlation	-.23*		
	Sig. (2-tailed)	.05		
One word	Pearson Correlation		.25*	.23*
	Sig. (2-tailed)		.03	.04
Phrases	Pearson Correlation		.28*	
	Sig. (2-tailed)		.01	
Paragraphs	Pearson Correlation			.28*
	Sig. (2-tailed)			.01

* Correlation is significant at the 0.05 level (2-tailed).

Comment Tone

With the first three research questions answered, and all three null hypotheses disproved, attention was given to writing apprehension, and the relationship that may exist between various aspects of teacher comments and student writing apprehension scores. The fourth research hypothesis was that writing apprehension is related to a statistically significant degree to various comment tones (positive, encouraging, negative, impartial, hostile, or resigned). The primary dependent variable was writing apprehension, and though other correlations were examined, the relationship between teacher comment tone and writing apprehension was the primary focus of this research. The null hypothesis was that student writing apprehension was not related to comment tone.

A statistically significant negative correlation ($r = -.30, p < .01$) was found between students' reports of positive comment tone and writing apprehension. Conversely, a statistically significant correlation ($r = .22, p < .01$) was found between negative comment tone and writing apprehension. Another significant negative correlation was found between comments that sounded like instructions and writing apprehension ($r = -.21, p < .05$). These results are shown on Table 11.

Among senior respondents, only one correlation was found between comment tone and writing apprehension levels. That statistically significant correlation ($r = .23, p < .05$) was between a negative comment tone and writing apprehension levels. No table is shown for this result, but the null hypothesis was disproved for both respondent groups.

Table 11. Correlation Between Comment Tone and Writing Apprehension for Freshman Respondents.

		Writing apprehension total
Positive	Pearson Correlation	-.29**
	Sig. (2-tailed)	.00
Negative	Pearson Correlation	.22*
	Sig. (2-tailed)	.02
Instructions	Pearson Correlation	-.21*
	Sig. (2-tailed)	.02

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Writing Apprehension

Finally, the fifth research hypothesis was that teacher comments would show statistically significant correlations with student writing apprehension, as demonstrated by the results of the writing apprehension scale. The null hypothesis was that student writing apprehension would not be affected by any of the four areas explored, which included placement, appearance, tone, and completeness of instructor comments.

In fact, no statistically significant correlations were found for freshman students between the various placements of comments examined and student writing apprehension. A statistically significant correlation ($r = .23$, $p < .05$) was found, though, between hand-printed comments and writing apprehension. A statistically significant negative correlation ($r = -.19$, $p < .05$) was also found between the use of comments written in lead pencil, and writing apprehension. These data are shown in Table 12.

Table 12. Correlations Between Aspects of Instructor Comments and Writing Apprehension Totals for Freshman Respondents,

		Total
Hand printed	Pearson Correlation	.23*
	Sig. (2-tailed)	.01
Lead pencil	Pearson Correlation	-.19*
	Sig. (2-tailed)	.04
Positive	Pearson Correlation	-.28**
	Sig. (2-tailed)	.00
Negative	Pearson Correlation	.22*
	Sig. (2-tailed)	.02
Instructions	Pearson Correlation	-.21*
	Sig. (2-tailed)	.02

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

No significant correlations were found for freshman respondents with any other aspect of comment appearance, including the use of red, green, purple, or other ink colors, the instructors' penmanship styles, or typed or electronically transmitted comments, although some of these aspects were correlated with different tones.

The correlations between comment tone and student writing apprehension were explored in earlier results, and were included on Table 11. In view of all of these results, the null hypothesis has been disproved for freshman students.

Among senior students, results were even more limited. The only direct and statistically significant correlations found between any aspects of teachers comments and writing apprehension were with negative comment tone ($r = .23$, $p < .05$), and with the use of a variety of pen or pencil colors ($r = -.24$, $p < .05$). These data are shown on Table 13.

The examination of the correlations discovered indicates that all five null hypotheses were disproved, indicating that some degree of correlation does in fact exist between specific aspects of teacher comments and student writing apprehension among both college freshmen and graduating seniors. Those correlations, however, are limited to the specific aspects identified, and the implications of the findings will be explored in greater detail later.

Table 13. Correlations Between Aspects of Instructor Comments and Writing Apprehension for Senior Respondents.

		Writing apprehension total
Negative	Pearson Correlation	.23*
	Sig. (2-tailed)	.04
Variety pen/pencil	Pearson Correlation	-.24*
	Sig. (2-tailed)	.03

*. Correlation is significant at the 0.05 level (2-tailed).

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to explore the relationship between one or more aspects of teacher comments and students' writing apprehension levels. Since this apprehension, specific to writing, has been found to affect writing skills and self-concept, as well as choices of course, major, and career, it is an important issue to study. Because little if any empirical research has been conducted in this area, or even into the exact causes of writing apprehension, the longstanding suspicion that negative teacher comments are the primary cause of writing apprehension is not reliably supported. This study was designed to provide information that might help answer questions about the effect various aspects of teachers' comments have on students' writing apprehension. A study of this type is necessary and important, in view of the growing emphasis on writing across the curriculum, because it contradicts commonly held beliefs about the best ways to provide written comments on students' writing. Teachers in every field write comments on their students' papers, and in so doing could have an effect on the writing apprehension of those students.

Questions that were explored included the possibility of relationships between four specific aspects of teacher comments. Those aspects included the placement of teacher comments on the paper; the appearance of comments, including such attributes as color, legibility, case, and darkness; the completeness of comments, which may range

from proofreading symbols to full paragraphs of explanation; and the tone of teacher comments, ranging from positive to hostile.

Summary of Findings

Of all of the aspects of teacher comments that were statistically analyzed, only a few were directly correlated to writing apprehension levels. Specifically, those included the tone of the comments as perceived by students. A number of other aspects of teacher comments, however, showed correlations with tone, which could indicate that those specific attributes could indirectly affect writing apprehension.

Student perception of the tone of comments, for example, varied depending upon the placement of the comments. Placements explored included the following: in the margins, near an error or other issue of discussion, at the end of the paper, and on a separate piece of paper. Comments in some of these places had a relationship with positive tone, and some with one or more of the tones considered to be less positive.

Appearance of teacher comments was also related to comment tone. Aspects of comment appearance explored included color (black, red, green, or purple) as well as case, legibility, darkness, and details like underlining. Interestingly enough, a number of these issues showed varying strengths of correlation with students' perceptions of comment tone. Even color was correlated with comment tone, though the results were surprising and unanticipated.

There were fewer correlations between the completeness of comments and comment tone than between other aspects of teacher comments and the perceived tone of those comments. Still, when comments of varying levels of completeness, ranging from symbols and abbreviations to full paragraphs, were analyzed, correlations were found,

indicating that the completeness of instructor comments could be related to the tone students perceive in those comments. This links those aspects of comment completeness to writing apprehension levels. In short, all four categories were found to be important and worth consideration when teachers evaluate their commenting styles and techniques in hopes of reducing the writing apprehension that has such a profound impact on students.

Discussion

Although research about writing apprehension and instructor comments, as separate issues, is available in plentiful amounts, little attention has been given to the relationship between the two. Research (Daly, 1978; Daly & Miller, 1975a; Daly & Miller, 1975b; Daly & Miller, 1975c; Faris, Golen, & Lynch, 1999; Onwuegbuzie, 1998; Onwuegbuzie 1999, Onwuegbuzie & Collins, 2001; Popovich & Masse, 2005; Wiltse, 2001; Wiltse, 2006) on writing apprehension has focused on the effect high levels of apprehension have on writing, as well as on self-perception and life choices such as careers. Given that the relationships between writing apprehension and both writing skills and life choices have been well established, the presence of writing apprehension assumes greater importance than it otherwise would.

At the same time as researchers (Daly, 1978; Daly & Miller, 1975a; Onwuegbuzie, 2000; Wiltse, 2006) were exploring writing apprehension, others were examining instructor comments. The majority of this research, however, focused on ways teachers at all levels could use comments to help students more effectively revise their work (Bardine, 1999, Bardine, Bardine & Deegan, 2000; Monroe, 2002).

Minimal research has been conducted into the causes of, or treatments for, writing apprehension. Speculation has long existed to the effect that writing apprehension was caused by years of negative teacher comments, and that the use of positive comments on student papers, together with the strict avoidance of negative comments, might be beneficial in reducing writing apprehension levels. This belief might be contraindicated, however, by reports in research (Bardine, 1999; Bardine, Bardine, & Deegan, 2000) that indicated that students were as accepting of negative comments as of positive ones, as long as those comments were specific and helpful. The scarcity of research into the specific effect of teacher comments on writing apprehension, together with Bardine's research, calls the widely held belief that negative teacher comments are a causative agent in writing apprehension into question. The cause and effect relationship remains a matter of assumption and speculation, and is still not definitively supported. Before any treatment for writing apprehension can be devised, it is necessary to examine the possibility of a relationship between instructor comments and writing apprehension.

This research project showed that statistically significant correlations do exist between specific aspects of instructor comments, and writing apprehension levels, but only in certain areas. By asking respondents to indicate how often they received particular types of comments, or comments with specific attributes or aspects, and correlating those results with responses about other aspects of teacher comments, it was possible to investigate the relationships between the various aspects of teacher comments, as well as between specific aspects of those comments and writing apprehension levels.

Comment Placement

The first aspect of instructor comments that was investigated was comment placement. Students were asked if they had received comments placed in a variety of positions, including in the margins, at the end of the paper, near issues of student writing that were under discussion, or on a separate piece of paper. Freshman students who indicated that they had received comments at the end of the paper, or in the margins, also indicated that they had received comments that were positive in tone. This type of comment need not convey a positive message. A comment with positive tone could point out an error or other problem, but would do so in a tone that is perceived by the student as positive. For example, a teacher might make a positive comment like, “Well done,” or alternatively, point out an error in a positive way by saying, “Your punctuation is generally very good, but this comma can be deleted.”

Comments placed on a separate piece of paper, however, showed correlations with comments having negative tones. This does not necessarily mean that teachers made negative comments on a separate piece of paper, but that the tone itself was perceived as negative by students. For example, students might perceive “This is very poorly written” as a comment with negative tone. However, they might also perceive a comment like, “This is your best work so far, but that’s not saying much” as having a negative tone. What this research actually indicates is that there is a correlation between negative comments and those placed on a separate page. In other words, the more often students reported receiving comments on a separate page, the more often they reported receiving comments with a negative tone.

In this case, attention might turn to the reasons instructors have for using a separate piece of paper. Do teachers provide comments on a separate page, especially when typed, for positive reasons such as increased legibility and comprehensiveness, or is it done for the convenience and comfort of the instructor? Despite what may be the good intentions of instructors, it is the perceptions of the students that are most important. On the other hand, do teachers use a separate page only when they view a paper, and its writer, as needing a large amount of correction? Do they produce an equal number of separate pages of comments for papers that are well written? Personal experience, both as a student and as an instructor, indicates that well-written papers may receive far fewer comments from the teacher than those that need improvement. If this is the case, perhaps teachers need to consider which comments are most important for a specific student, and focus on those central issues, rather than trying to address everything they find worthy of comment. This particular finding is interesting because of the contrast it presents with the conclusions of Lunsford and Straub (1995) in which they suggested that comments placed on a separate piece of paper, especially in letter form, might tend to be more facilitative than comments placed within the paper, even on the last page. Comments in the paper tended, in their view to be more directive in nature. In addition, Elbow (1989) suggested writing comments separately, in letter form, in order to have those comments be perceived in a less threatening manner by students. Yet in this study, comments placed on a separate piece of paper showed a closer relationship to negative tone than to any other comment tone. Further research into the actual reasoning behind teachers' use of a separate piece of paper for comments could be extremely valuable as well as interesting.

Whenever we examine correlations, it can be important to consider what the causative factors might be, even though causes are not strictly indicated by the statistical analyses. For example, comments in the margins, or at the end of the paper, might simply be accepted as the norm, causing them to be correlated, in the freshman students' minds, with positive or neutral comment tone. Comments on a separate piece of paper may overwhelm the student, by their length or specificity. In addition, comments on a separate paper are often different in appearance from those in the margins or at the end of the paper. While one cannot determine specific causes through statistical analyses of these types, the questions that are raised by these correlations can be important as possible topics for future research. What is there about comments on a separate page that clearly differentiates them from comments in other places? Why might comments on a separate page be reported by freshman students who also report negative comments more often than comments in the margins or at the end of the students' papers?

One thing to consider might be the appearance of those comments, another aspect that was considered in this research. Comments that were on a separate page may be typed, which may communicate a sense of impersonal criticism, as opposed to handwritten comments, which are more familiar in appearance, and which tend to be briefer. In addition to seeming impersonal, comments on a separate page may simply be so much longer than those placed within the students' papers that they may be perceived as overwhelming to students who receive them. It is possible that students may panic at the sight, and feel like the experience is negative simply because of the intimidating length and appearance of those comments on separate pages. Further research into this aspect of teacher comments could be interesting and productive.

Among senior respondents, however, the results of data analysis indicated that comments placed in the margins, at the end of the paper, or on a separate paper all showed correlations with impartial comment tone. At the same time, there were also relationships between comments placed at the end of papers, or on a separate page and encouraging comment tones. This seems to be an almost direct contradiction to the correlations previously described. A final correlation, a negative one, was found between comments in general being present on the paper and a resigned comment tone. A negative correlation, in this case, indicates that the more often comments were present on student papers, the less often those students reported having received comments which they felt had a resigned tone.

There are several notable aspects of these findings. First is the fact that seniors seem to view comments placed in a number of locations as impartial comments. They also seem to be more willing than their younger colleagues to perceive comments as encouraging. Rather than identifying comments as simply positive or negative in tone, these senior respondents focused on viewing comments as either impartial or encouraging.

An interesting aspect of the dual exploration of data from these two different groups of students (seniors and freshmen) is that it provides the opportunity to compare and contrast those results. The first aspect of this dual-group investigation to be examined must be the possibility of differences between the two target groups. Differences of age and educational level should be kept in mind, as well as years of exposure to college professors as opposed to high school teachers. One issue that could contribute to the different results between these two groups is the possibility that more highly

apprehensive students left college before reaching the senior year. That could produce a slightly skewed result, although when the descriptive statistics for writing apprehension itself were studied, the two groups did seem remarkably similar, at least in terms of writing apprehension. The mean score on the Writing Apprehension Scale was 75 for freshmen, and 72 for seniors. Still, a change in the make-up of the two groups, as reflected by differing demographic information, must be taken into account when comparing the results. Aside from these issues, it would be interesting to consider why freshman respondents identified comments as being of positive or negative tones, while senior respondents were much neutral in their identification of comment tone. It is possible that over the course of their years in college, senior respondents have simply been exposed to a wider range of instructor comments, and have learned to view many comments that they might earlier have considered negative as actually being impartial comments.

Seniors may also be more ready to see encouragement in comments they would earlier have seen as negative. At the same time, these older students may not be as willing to identify comments as positive. This could be a factor of time, experience, and personal maturity. However, another possibility worth considering is that college instructors, especially those who teach the upper level classes most recently taken by senior respondents actually do use different commenting techniques and styles than do the high school teachers whose comments were reported by the freshman respondents. Since this project did not investigate that issue, it can only be discussed as a possibility.

There are differences in the training, education, and experience of college instructors and high school teachers. In their pursuit of graduate degrees, and in their

experiences and expectations with college students rather than high school students, it is possible that college professors actually are making comments, in numerous locations on students' papers, that are more impartial in tone than the comments made by high school teachers. Whether the differences in these students' perceptions of the tone of comments in various places is based on their own experiences and maturity levels, or on different commenting techniques utilized by the instructors, further research into these differences in perceived comment tone could be of great interest to both groups of instructors.

Comment Appearance

For the purposes of discussion, comment appearance was divided into two categories. First, the color and type of writing implement was examined. This aspect of comment appearance has been under discussion for a number of years, due to widespread strong opinions about the impact of the color of teacher comments. For the sake of clarity and simplicity, comment appearance was divided into two categories: comment color, and other aspects of comment appearance. Comment color will be discussed first, followed by other aspects of comment appearance which may have had an impact on student writing apprehension, or on student perception of comment tone.

Comment Color

Students were asked whether they received comments written in black pen, lead pencil, red pen or pencil, green pen or pencil, purple pen or pencil, some other color of pen or pencil, or a variety of colors of pen or pencil. Of those, four aspects of comment color showed statistically significant correlations with comment tone, as reported by freshman respondents, including lead pencil, green pen or pencil, purple pen or pencil, and other pen or pencil colors. The last option, other pen or pencil colors, was a separate

response indicating that teachers had used some color not listed on the survey instrument. For example, if a teacher used orange or brown pen or pencil, an option which was not shown, the student would be expected to respond positively to the question asking if their instructors had used some other color of pen or pencil. These results seem to indicate that freshman students' perceptions of faculty comments did in fact vary based on the color of the writing implement used. All of the four comment colors listed showed correlations with either hostile or negative tones. In addition, green pen or pencil was also negatively correlated with positive tone. In contrast, red pen or pencil, which has been so widely condemned as being too hostile for marking student papers, showed no statistically significant correlation with any comment tone, at least among freshman respondents.

These results are of particular interest because of what is left out, rather than what is included. What about red pen or pencil? Teachers have heard for a number of years that they should switch to green or purple pen, or even to plain lead pencils. Why, then, do all four of the suggested alternatives to red pen or pencil (lead pencil, green or purple pen or pencil, and other colors of pen or pencil) show correlations with negative and/or hostile comment tones, while red pen or pencil did not show any correlations at all, according to freshman respondents?

These questions are intensified, in some ways, by the responses of the senior respondents. Comments written in purple pen or pencil still showed a correlation with hostile tone; however, they also showed a correlation with encouraging comment tone. Lead pencil was negatively correlated with impartial tone, while comments made in pen or pencil colors not mentioned in this study were perceived as impartial. Those other

colors of pen or pencil, however, were also linked with hostile comment tone. These results, as contradictory as they may seem to be, could actually indicate several interesting trends among college seniors. First, it is possible that a wider range of perceptions and responses exists among those students who are at the end of a bachelors degree program, than among the freshman respondents, who may be slightly more reactionary in their perceptions. Seniors may, at least in part, be slightly more accepting of different approaches, leading to the less negative perceptions of comments made in green or purple pen or pencil. They may have been exposed to more variety in comment colors, allowing them to develop a more neutral, or even mixed, response to comments made in green or purple, which the freshman respondents perceived as hostile or negative. It is also possible, once again, that the instructors themselves behaved differently at the college level, by using a wider variety of writing implements, or even by wording comments differently, leading to different perceptions of comment tone overall.

Once again, however, the surprise among the responses of graduating seniors is their perception of comments made in red pen or pencil. While the use of red has been widely criticized, and while comments made in red pen or pencil showed no correlation with any specific comment tone among freshman respondents, the senior responses were slightly different. First, comments made in red pen or pencil showed a negative correlation with resigned comments, a tone which could easily be construed as slightly negative by many students. A negative correlation, in this case, would indicate that the more often students reported receiving comments written in red, the less often they reported receiving comments they perceived as resigned. These results hint at the

possibility that comments written in red pen or pencil might be viewed as slightly more positive than those written in other colors, and tend to uphold the view that red is appropriately passionate for commenting on student writing. This is confirmed by the fact that comments written in that color were also correlated with positive comment tone, a notable difference from the perceptions of freshman students. Why did these two groups of students respond differently to red pen or pencil?

In exploring the possible causes of these reported relationships between color of writing implement and perceived comment tone, it is important to look at the issue from both sides. Students may find red comments unremarkable, or in the case of senior respondents, even positive, because they are accustomed to receiving comments in that color. Despite the growing use of other colors of pen, it is possible that students still regard red as the norm, and thus unexceptional. There are other things not included in this study that could have had an impact on student perceptions of comment tone. For example, if a student connected the use of red pen or pencil with a favorite teacher, they may view comments written in that color in a slightly positive manner. Conversely, if they were accustomed to receiving strongly negative comments written in red, they might perceive the color in a more negative light. Cultural background could also have an impact on student perceptions. This study did not address these issues, but they would be of interest for future research.

The differences in student perceptions of comment tone based on the color of writing implement used could come from the instructors' behavior as well. It is relatively easy for an instructor to change the color of writing implement used to grade papers. It is much more difficult and challenging to change the style, wording, or tone of those

comments. Is it possible that teachers, while changing to green or purple pen or pencil, have neglected to move toward a more positive comment tone, in the perhaps mistaken belief that changing the color was enough? A change in pen or pencil color, however, may leave comments as negative in tone as ever.

A second question that should be asked is what impact these responses might have on instructor attitudes toward the use of red pen. Perhaps a general re-evaluation of color, as well as other aspects of instructor comments, is in order. Challenging the widespread rejection of red pen or pencil for grading papers might be a beginning step in that re-evaluation.

It might also be interesting to look at the origin of the attitudes that have developed about the use of red pen, and of alternative colors. The controversy about using red pen began when a few parents (Associated Press, 2005) objected to the use of red pen or pencil based on their belief that red was too harsh, and was associated with anger, blood, and hostility. While some teachers (Aoki, 2004; DeMoranville, 1994; 2004; Lion, 2008a) disagreed, and continued to use red pen or pencil, insisting that it was passionate, and passion was appropriate for grading papers, many teachers began to use purple, which was viewed as having the power of red and the soothing impact of blue at the same time (Aoki, 2004, Lion, 2008, Parmet, 2004). The fact that pen companies reduced the number of red pens produced, and increased the number of purple pens, is indicative of how widely accepted the attitude was (Parmet, 2004). Green was viewed by some teachers as an indicator of growth, and was felt to be more acceptable than red (Aoki, 2004, Parmet, 2004). Lead pencil was also viewed by many as more acceptable than red because of its neutral color, and impermanence. In fact, to those who objected to

the use of red pen or pencil, any other color was preferable, which was why this research project also explored the impact of un-named “other” colors of pen and pencil, as well as the use of a variety of colors. Yet in the portion of this study dealing with freshman students, both lead pencil and other colors of pen or pencil were correlated with comments that had a hostile tone, while green and purple colors showed correlations with negative and hostile comment tones, and red did not show any statistically significant correlations with any comment tone, positive, negative, or hostile. Even more interesting was the fact that senior respondents generally seemed to equate comments written in red pen or pencil with a positive tone.

While many desktop publishers, graphic designers, and color psychologists (Parmet, 2004) have discussed the emotional impact of the use of colored ink in brochures and publications, as well as the impact of paper color itself, there may be a difference between the impact of a page printed entirely in red, or on red paper, or even a whiteboard covered with red printing, and the impact of red markings on a page with black printing, where the black predominates and the red acts as an accent color. Is it possible that the parents who first objected to the use of red for marking papers were basing their opinions on experience in publishing, desktop or otherwise? If so, given the results of this research, it seems possible that their conclusions, while well meant, were misguided.

Of more concern, however, is the wide acceptance their attitudes came to have. Empirical studies on the use of red pen or pencil to make comments on student papers do not appear to exist, though there are numerous editorials and speculative pieces. It is important to note, too, that in this study students were not asked whether they viewed

comments written in red as hostile or negative. They were merely asked how often they received comments written in each of the colors possible, and then asked, in a separate section, how often they received comments that were positive, negative, resigned, impartial, or hostile.

One factor this approach avoids, at least to a degree, is the increasing impact of any possible instruction, especially for upper level education students, about the impact of color on the perception of teacher comments. Students who are specifically told that they should use green or purple writing implements because red is hostile, will accept their professors' statements, often without question, and may then identify those red comments as hostile. Should professors, however, be promoting, or even accepting, attitudes about color that are not entirely supported? Is it possible that most students view red pen as the norm, and see no hostility because red is the color they expect? Could they perceive green, purple, or other colors of pen or pencil, and even lead pencil, as more hostile and negative specifically because they are unexpected? Would students who have received negative comments in green or purple ink come, in time, to view those colors as negative, through their association with the tone of the comments themselves? In fact, do personal color preferences enter into perceptions of comments written in different colors, with some people perceiving red as cheerful, rather than hostile, and some perceiving purple or green as negative, associated with bruising, age, deterioration, or other negative issues?

Where does this leave the red-pen controversy? Although this is a minor research project, with a limited number of respondents, it should at least raise questions about the validity of the debate on pen color. Since red pen showed correlations only with positive

comment tones, while green and purple showed correlations with negative and hostile comment tone, perhaps a return to red pen is indicated, or at least allowed.

Other Aspects of Comment Appearance

Instructor penmanship styles, including the use of typed or electronically transmitted comments, underlining, and uppercase or lowercase letters were also investigated. Typed or electronically transmitted comments were strongly related, among freshman responses, to hostile tone, a finding that tends to confirm questions raised earlier about comments on a separate page. Among senior respondents, these comments showed correlations with negative tone, confirming the issue yet again. This raises several interesting issues. First, what are the implications for on-line classes, where all communication between teacher and student is provided in a typed or electronically transmitted format? In addition, this study did not draw a distinction between typed comments placed on a separate page, and those inserted within the student paper itself. There are a number of computer programs that allow instructors to insert comments and corrections directly within the text of the student paper, when that paper has been submitted electronically. Because this study did not ask about this type of comment, or distinguish between typed or electronically transmitted comments placed on a separate page and those placed directly on the page, it remains a topic for future study. An examination of the use of typed and electronically transmitted comments, as opposed to hand-written ones, could be enlightening.

Very lightly lettered comments, and illegible comments both showed correlations with comments having a hostile tone, among both freshman and senior respondents. In addition, lightly lettered comments were correlated with both comments of a resigned and

a negative comment tone, while both light lettering and illegibility were also negatively associated with positive comment tone among the freshman respondents, reinforcing the finding that comments showing these aspects of appearance are correlated with generally negative impressions on the parts of students, rather than positive ones.

Readability might be worth exploring in this area. Illegible comments, as well as those that are extremely light, may simply be difficult for students to read, leading to frustration, confusion and a final impression of hostility. Why are teacher comments sometimes illegible? Why are they occasionally written very lightly? There are a number of possible explanations, aside from innate penmanship styles. First, teachers are often overburdened with paper-grading responsibilities. A combination of grading fatigue and physical fatigue of the hand muscles could contribute to penmanship difficulties, leading to comments that are illegible, although no definitive research was found to support this possibility. A hand that is clenched on a pen, carefully printing comments on paper after paper, will soon begin to cramp and become fatigued. Much like doctors, some instructors may begin to write as quickly as possible, in order to get through the task in a minimum of time. Alternatively, they may try to keep their hand relaxed, to avoid writer's cramp, which could affect both legibility and darkness of the writing. The need to keep hand muscles relatively relaxed may have an unforeseen and undesirable effect on student perceptions of comments made by instructors.

The first alternative that may occur to instructors who note that illegibility and light lettering are correlated with hostile tone, may be to turn to typing comments on a separate page. However, from a students' view, it appears that those typed comments may seem even more hostile than lightly lettered or illegible comments. How, then, are

teachers to meet the needs of students? How can they provide guiding comments, while making sure that those comments are legible and dark enough to read easily? This could be yet another topic for further research.

Additional correlations between comment appearance and comment tone included the correlation of darkly lettered comments with impartial as well as negative tone, among freshman respondents. This raises questions about how darkly comments should be written. If very dark comments are related to impartial and negative tones, and lightly lettered comments show correlations with hostile tone, what would lead to a perception of positive or encouraging tone? Perhaps viewing those two as the extremes might answer that concern. Unfortunately, no questions about comments of normal darkness were included in this study. Are students identifying both very light comments, which may be difficult to read, and very dark comments, which may seem harsh, as having some degree of negative tone, while accepting a certain range as the norm, and perhaps perceiving those comments in a more positive light?

Senior respondents' data indicated a few additional correlations. Comments written in uppercase lettering were correlated with resigned comment tone. However, comments written in mixed case, cursive handwriting, and legible handwriting were all negatively correlated with resigned comment tone, which could indicate that these styles were viewed in a slightly more positive light than comments written in other manners. It is interesting, as well, to note that these senior respondents once again show more of a tendency toward identifying impartial and resigned comment tones. Are these students simply more mature and tolerant than younger students, or are college teachers, especially those teaching upper level classes, more resigned in the comments they make?

All of these findings, taken together, seem to indicate that there could be a correlation between some aspects of comment appearance, and student interpretations and perceptions of those comments. Further research into this area might help to guide instructors in choosing writing implements, comment transmission methods, and even penmanship styles that would help their students in perceiving comments positively rather than negatively.

Comment Completeness

The third aspect of instructor comments that was explored was that of completeness. Researchers (Bardine, 1999; Bardine, Bardine, & Deegan, 2000; Monroe, 2002) have long noted that students sometimes complained of not understanding symbols, abbreviations, single words or phrases that were used, and not knowing what those comments were intended to tell them to do. Comments need to be complete enough to be understood, regardless of any other impact they may have. The single word “awkward,” for example, may not specify with sufficient clarity what it is the teacher wants the student to change. Therefore, in this study, respondents were asked about the completeness of comments they had received, and how often, on a five-point likert-type scale, they had received symbols, abbreviations, single words, phrases, complete sentences, and paragraphs.

Among those levels of completeness, only the use of symbols, abbreviations, and sentences showed any significant correlations with the freshman students’ perceptions of teacher criticism that were hypothesized. Symbols showed a surprising correlation with encouraging comment tones, and sentences with negative comment tones. Abbreviations showed a negative correlation with positive comment tones. Clearly, there is some level

of correlation between completeness of instructor comments, and the students' perceptions of the tone of those comments. However, that correlation is nearly opposite what was expected based on other, qualitative studies (Bardine, 1999; Bardine, Bardine, & Deegan, 2000; Monroe, 2002) that elicited student responses. Although students may complain about not understanding symbols or abbreviations, comments including symbols, specifically, were perceived in a generally positive manner. Both abbreviations and complete sentences, however, appear to be negatively perceived by students.

Seniors responded in exactly the same manner as freshmen to comments written as abbreviations, with a negative correlation to positive comment tones. The more frequently they reported receiving comments that used abbreviations, the less frequently they reported receiving comments with a positive tone. However, some differences between the two groups' responses did exist in other areas. For example, among senior respondents one-word comments were associated with both impartial and hostile comment tones, while phrases were correlated with impartial comment tones only, demonstrating yet again the tendency for students preparing to graduate to identify comment tones as impartial. Comments written as paragraphs, however, were correlated with hostile comment tones, the most negative response among the senior students' data.

In a day when instructors are frequently urged to write full, complete comments, these findings raise questions. Although teachers clearly need to be cautious about the use of symbols with which their students may not be familiar, that confusion itself may not lead to negative perceptions of the comments. Simple instruction on understanding proofreading marks and symbols may alleviate any existing confusion, allowing teachers to use symbols without concern that they are harming students in any way. The use of

abbreviations, one-word comments, and complete sentences, however, may need further exploration. Do abbreviations and one-word responses leave students even more confused than symbols? Is there some sense of haste or abruptness in those abbreviated or one-word comments that leads to the negative correlation between abbreviations and positive comment tone, as well as to the relationship between one-word comments and impartial, as well as hostile, comment tones?

How and why do instructors use abbreviations in comments, or write one-word comments? Are they providing adequate instruction in the classroom to help students understand the comments they write? While the fatigue engendered by the need to grade an ever-increasing number of papers may lead instructors to abbreviate, or to use symbols, or even special codes in grading papers, there are still other questions about the completeness of instructor comments that must be asked. Is there some correlation between instructor attitudes and the use of these very brief comments that leads to the results described? Alternatively, are students hoping for more detailed guidance, and finding themselves left with a feeling of disappointment, abandonment, and even rejection when responses, through their brevity, seem curt and abrupt.

Since comments phrased as sentences, like those using abbreviations, show significant correlation with comments having a basically negative tone, questions also arise in this area. Is it the fact that comments are phrased in sentences that leads to the negative perceptions of those comments, or is there something about what instructors write when they choose to write in complete sentences that becomes intimidating in some way? Could the correlation find its genesis, not in the students' perceptions, but in the instructors' use of sentences as opposed to symbols and abbreviations? Alternatively,

could it be that symbols are simply too brief to carry the weight of a particular tone in the mind of the students, while abbreviations and sentences are not? Yet, in contrast to these briefer comments, only those written as paragraphs actually showed any correlation with hostile comment tone. This is a radical contradiction of the idea that full and complete comments are the best. Again, further research in this area could be of great interest.

Comment Tone

Student perceptions of the comment tones themselves were also examined as a possible element that might affect student responses, specifically in terms of writing apprehension levels. In view of widely held beliefs regarding the impact of negative teacher comments on writing apprehension, it was not surprising to find correlations between negative comment tone and writing apprehension levels, at least for freshman students. It was not unexpected, either, to find that positive comment tones were negatively correlated with writing apprehension levels, indicating less writing apprehension among those who reported receiving comments with positive tone, than among those who reported receiving comments with a more negative one. It is important to remember Bardine's (1999) finding that students accepted negative comments, which pointed out errors, or instructed them not to do certain things, if their tone was helpful and positive. The tone of a comment could be described as the underlying mood of the comment, as opposed to the content. For example, a comment might read, "This paragraph is a repetition of what you said in the previous paragraph. You probably should leave it out, unless you have something specific to add." While the comment itself is negative, the tone is quite positive and even encouraging. Because statistical analysis of correlations like these do not specify causation, it is not possible to state with any

certainty whether high quality writing, perhaps coupled with low writing apprehension, led to comments that were perceived as positive in tone, or vice versa.

Among senior respondents, however, only comments with negative tone showed any relationship to writing apprehension scores. Clearly, while the tone of an instructor's comments is not the only factor associated with writing apprehension, it is worthy of consideration, particularly when examining the impact of positive versus negative comment tones.

The final portion of the tone section of the survey asked students about receiving comments that sounded like orders, suggestions, instructions, and questions. Of those, only suggestions showed a negative correlation with writing apprehension, indicating that freshman students who received comments phrased as suggestions had lower writing apprehension levels than those who received other types of comments. This raises a number of interesting, but not unexpected, questions. Of the four comment types examined in this section, those phrased as suggestions were the only ones that showed any correlation with writing apprehension, and that correlation was only present among freshman. No correlations were found in this area for senior respondents. Researchers (Bardine, 1999; Bardine, Bardine, & Deegan, 2000) have indicated that both suggestions and questions might be perceived more positively than orders or instructions. However, in this study, orders and instructions showed no correlations, positive or negative, with writing apprehension, and neither did comments phrased as questions. Only suggestions showed a negative correlation with writing apprehension, indicating that a possibility exists that comments phrased as suggestions are better received than others. Instructors

who wish to alleviate, or at least avoid exacerbating, student writing apprehension levels, might consider phrasing more of their comments as suggestions.

Aspects of Teacher Comments Other Than Tone

Finally, data were analyzed to determine which, if any, aspects of teacher comments, aside from tone, might be correlated with writing apprehension. In fact, for freshman respondents, two aspects of appearance, the use of hand-printed instructions and the use of lead pencil, showed correlations with writing apprehension levels. Interestingly, hand-printed comments, as distinct from those that are hand-written in cursive style, showed a positive correlation with writing apprehension levels, while those written in lead pencil showed a negative correlation. Since some instructors who hand print their comments do so to increase legibility, the first of these two findings is slightly surprising. Why would freshman students respond more negatively to hand-printed comments than to cursive ones, as seems to be indicated by the elevated writing apprehension levels of those students who reported receiving hand-printed comments? Further exploration of possible correlations between hand-printed comments and other aspects of comment appearance, such as legibility, showed no significant correlation. Additional research might be helpful to increase understanding of this particular finding.

Lead pencil showed a negative correlation with writing apprehension for the freshmen, which might tend to confirm the belief of some instructors that this is the preferred implement, despite its earlier, strong correlation with hostile comment tone. Speculation about this correlation might focus on the impact of the impermanence and erasability of pencil, and on the general societal acceptance of pencils as a commonly used writing implement. However, this does not respond to the general debate over the

use of pens or pencils of varying colors. While lead pencil may be the only writing implement to show a correlation with writing apprehension, and may show that correlation only among freshman respondents, it is important to remember that neither the red pen, so widely condemned, nor green or purple pen, equally widely acclaimed, showed any correlation at all with writing apprehension. In fact the use of both green and purple pens was correlated, among freshmen, with negative or hostile tones, while among seniors both purple and other colors of writing implement were associated with hostile comment tone—a correlation that negates the wide acceptance among teachers of the use of ink colors other than red. With the exception of lead pencil, the color of writing implement used does not appear to affect writing apprehension levels. Even in that case, the correlation between comments made in lead pencil and hostile comment tone raises questions of its own.

It was not surprising, either, to find correlations between both positive and negative comment tone and writing apprehension levels, nor that the correlation between positive comment tone and writing apprehension was negative, indicating lower apprehension among students who reported receiving comments of positive tone, while the correlation between negative comment tone and writing apprehension was positive, indicating the opposite. This agrees with long-standing research (Bardine, 1999; Bardine, Bardine, & Deegan, 2000; Monroe, 2002) suggesting that positive comments are much more beneficial to students in a variety of ways than negative comments. Comments phrased as instructions were also negatively correlated with writing apprehension levels, as mentioned in the previous section.

Although only a few aspects of teacher comments showed direct correlation with writing apprehension, it could also be important to look back at the effect of various issues on comment tone. For example, many aspects of teacher comments showed correlations with comment tone. The tone of comments does have an impact on writing apprehension; therefore, careful consideration of any aspects of teacher comments that are linked with positive, negative, or hostile tone would be advisable.

Placement of comments, the first aspect considered, showed several correlations with comment tone among freshman respondents. Comments placed at the end of the paper showed a correlation with positive comment tone. Those on a separate paper, however, showed a negative correlation with positive comment tone. Among seniors, no aspects of placement led to a positive comment tone, although both placement at the end of the paper and on a separate paper were correlated with encouraging tone. Comments with positive tone, and those with negative tone, did have an effect on writing apprehension, and the location of comments seems to affect the way students perceive the tone of those comments. It may be possible, therefore, that although placement of instructor comments did not show any direct correlation with writing apprehension levels, the successive correlations between comment placement and comment tone could indicate an indirect link.

Specific aspects of comment appearance might also be considered to be indirectly related to writing apprehension levels. Purple pen or pencil showed some correlation with negative comment tone, among freshmen, and green pen or pencil showed a negative correlation with positive comments, making it possible that both of these pen or pencil colors could be considered indirectly correlated with writing apprehension levels, through

the comment tones with which they are directly correlated. Interestingly, the only color of comment that was correlated with a positive comment tone was red, so perhaps the use of red pen or pencil might actually have a beneficial impact on writing apprehension levels. At the very least, this correlation between red pen or pencil and student perception of positive comment tone indicates that comments may not be viewed as negative simply because they are written in red. If comments made in red pen or pencil are actually viewed as having a positive tone, that resultant tone could impact writing apprehension levels.

Among freshman respondents, both underlined and lightly lettered comments were correlated with negative tone, which in turn was correlated with higher writing apprehension scores. Lightly lettered comments and illegible comments showed negative correlations with positive comment tone, indicating that they were viewed negatively. Since both negative and positive comment tones were correlated with writing apprehension scores, these specific aspects of comment appearance could also be important to consider. Among seniors, however, no aspects of comment appearance aside from color were associated with positive comment tone. However, typed comments were associated with negative comment tones.

Comments phrased as sentences were strongly correlated with negative tone, while abbreviations were negatively correlated with positive comment tone. These two might also be considered to be indirectly correlated with writing apprehension levels.

Regardless of whether these indirect correlations could be considered in formulating instructor comments, the failure to reject all five of the null hypotheses examined indicates that there is, in fact, a limited relationship between some aspects of

teacher comments and the perceptions, as well as the writing apprehension levels, of the students. These findings could be of interest to teachers, instructors, and professors.

Since researchers (Daly, 1978; Daly & Miller, 1975b; Faris, Golen, & Lynch, 1999; Onwuegbuzie, 1998; Onwuegbuzie 1999, Onwuegbuzie & Collins, 2001; Popovich & Masse, 2005; Wiltse, 2002; Wiltse, 2006) have documented the impact of writing apprehension on choices of course, major, and career, as well as on high school, college, graduate student, and employee writing skills, and even on self concept, addressing the issue could be important. If it can be determined what aspects of comment appearance, placement, tone, and completeness have negative effects on writing apprehension levels, and even on general student perceptions of those comments, teachers and instructors at all levels may be able to work to minimize the problem. Conversely, identifying the aspects of teacher comments that reduce writing apprehension could encourage instructors to use specific commenting techniques that might be helpful.

Future Research

There are a number of exciting possibilities for further research that stem from the results of this project. First, each of the areas of investigation could benefit from further exploration. One intriguing possibility is a detailed comparison of commenting techniques and styles used by high school and college instructors. This is of particular interest in the area of comment placement, where the correlations between comment placement and comment tone differed dramatically between freshman and senior respondents. Some other possible topics for future research follow:

- What reasons do teachers have for typing their comments or transmitting them electronically, and how do those comments, especially when placed

on a separate page, differ from comments placed within the students' papers?

- How does the content or tone of comments placed in various areas, or having different appearances or levels of completeness compare, and how much do these variations explain contrasting student perceptions of comments based on placement, appearance, and completeness? In what way might oral transmission of comments affect student perceptions of teacher comments and of student writing apprehension levels?
- How do very brief comments differ from lengthier comments, and what leads teachers to write comments of varying lengths on student papers?
- To what degree are professionals in fields such as higher education, which require writing and even publication for tenure and advancement, affected by writing apprehension?

Because the causes of writing apprehension have not been fully explored, any or all of these issues might have an impact. Research into all of these areas could be helpful, and teachers may not be left alone to deal with this issue. It might be best approached from many directions, with all of the adults involved in a child's life contributing to the attempt to reduce or even overcome the debilitating anxiety that is writing apprehension.

Conclusion

The cause of writing apprehension has not been clearly identified. It may have its roots in personality, home environment, early writing experiences, or other aspects of school experiences. Regardless of the root cause, if teachers can begin, in the early grades, to use commenting techniques that are neutral if not positive, they may be able to

avoid increasing writing apprehension levels, at the very least. In fact, optimal use of those aspects that showed a negative correlation with writing apprehension levels might work to actually decrease writing apprehension.

For many years, teachers at all levels have discussed ways to respond to student writing, looking for the most helpful and effective ways to do so. Responding to student writing using one of the numerous computer programs designed for the task, and providing written comments of various types, styles, modes, placements, and colors have all been discussed in depth, and much more research remains to be conducted. After writing widely about instructor comments, Sommers (2006) returned to familiar ground when she joined in a four-year long research project that examined the writing of 400 students as they progressed through college courses. She began to view instructor comments as tools intended to help students improve the papers in question, and to hope that students would take the things they learned from comments on one paper forward to the next paper, and the next, and on into future courses, educational levels, and careers. Sommers finally realized that she could not separate the language of instructor comments from the language used in the classroom. Written comments may be most effective, she determined, when they are an integral part of the classroom dialog. As teachers at all levels learn to direct their comments, not to individual papers, but to student colleagues who are viewed as apprentice academics, these teachers can begin to mesh their written comments with their classroom instruction, bringing both to their optimal effectiveness. Teachers need to work to develop a partnership with their students, to build trust and communication so that teacher comments, in whatever form or color, work to enhance the work done in the classroom. As important as the classroom dialog is, and as important as

teacher comments are, there may still be aspects of instructor comments that produce specific effects, for good or ill, in student writers. Only when we can identify those aspects and work with them to enhance student skills and teacher effectiveness will we be able to improve the overall effect of teacher comments, on and off student papers, on students' perceptions and on their writing apprehension levels.

Clearly, classroom instruction is critically important in assisting students to be successful in their writing efforts. Written comments are equally important, and when both are used to their optimal effectiveness to increase student comfort with writing and reduce writing apprehension, results may be amplified. However, without careful attention to the impact of various aspects of written comments on student writing apprehension, this coordinated effort cannot reach its full potential in helping students become less apprehensive about writing.

APPENDICES

Appendix A

Writing Apprehension Scale

Below is a series of statements about writing. There are no right or wrong answers to these statements. Please indicate the degree to which each statement applies to you by circling the number that shows whether you strongly agree, agree, are uncertain, disagree, or strongly disagree with the statement.

		Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. I avoid writing	+					
2. I have no fear of my writing being evaluated.	-					
3. I look forward to writing down my ideas.	-					
4. I am afraid of writing when I know it will be evaluated.	+					
5. Taking a writing course is a very frightening experience.	+					
6. Handing in a written piece makes me feel good.	-					
7. My mind seems to go blank when I start to work on my writing.	+					
8. Expressing ideas through writing seems to be a waste of time.	+					
9. I would enjoy submitting my writing to magazines for evaluation and publication.	-					
10. I like to write down my ideas.	-					
11. I feel confident in my ability to express my ideas clearly in writing.	-					
12. I like to have my friends read what I have written.	-					
13. I'm nervous about writing	+					
14. People seem to enjoy the things I write.	-					
15. I enjoy writing.	-					

16. I never seem to be able to write down my ideas clearly	+					
17. Writing is a lot of fun.	-					
18. I expect to do poorly in writing classes even before I enter them.	+					
19. I like seeing my thoughts on paper.	-					
20. Discussing my writing with others is an enjoyable experience.	-					
21. I have a terrible time organizing my ideas in a writing course.	+					
22. When I hand in a paper, I know I'm going to do poorly.	+					
23. It's easy for me to write a good paper.	-					
24. I don't think I write as well as most other people.	+					
25. I don't like my writing to be evaluated.	+					
26. I'm not good at writing.	+					

Scoring Procedures:

The response "strongly agree" has a value of one. If a student strongly agrees with statement 1, a positive statement, add one point to his or her score. The response "strongly disagree" has a value of five. If a student strongly disagrees with statement 2, a negative statement, subtract five points from his or her score. The other responses have the following values: agree, two; uncertain, three; disagree, four. If a student makes one of these responses, add or subtract the appropriate value. To determine whether to add or subtract, simply check the symbol opposite each statement. $\text{Writing Apprehension} = 78 + \text{positive statement scores} - \text{negative statement scores}$. Scores may range from a low of 26 (a very apprehensive writer) to a high of 130 (an extremely confident writer).

Appendix B
Instructor Comment Survey

Section I—Demographics

1. My age is:

- ☐ A. Under 18
- ☐ B. 18-19
- ☐ C. 20-22
- ☐ D. 23-25
- ☐ E. 26-30
- ☐ F. Over 30

2. I am a:

- ☐ A. Male
- ☐ B. Female

3. My current grade level in college is:

- ☐ A. Freshman
- ☐ B. Sophomore
- ☐ C. Junior
- ☐ D. Senior

4. My GPA in the last school year was:

- ☐ A. 1.0 – 1.9
- ☐ B. 2.0 – 2.9
- ☐ C. 3.0-3.9
- ☐ D. 4.0 and above

5. I am currently taking _____ credit hours of classes.

- ☐ A. 1-11
- ☐ B. 12-15
- ☐ C. 16-20
- ☐ D. more than 20

6. My family income level is:

- ☐ A. Below \$20,000 per year
- ☐ B. \$20,001 to \$30,000 per year
- ☐ C. \$30,001 to \$40,000 per year
- ☐ D. \$40,001 to \$50,000 per year
- ☐ E. More than \$50,000 per year

7. My ethnic-racial background is primarily:

- ☐ A. African/American or black
- ☐ B. Hispanic/Mexican/Latino
- ☐ C. Asian
- ☐ D. Native American
- ☐ E. Hispanic/Mexican/Latino

8. My native language is:

- ☐ A. English
- ☐ B. Other

9. My home country is:

- ☐ A. U.S./Canada
- ☐ B. Other

10. My parents' educational background is:
_____ A. One or both parents completed high school.

_____ B. One or both parents completed college

_____ C. One or both parents completed a graduate degree

11. I have a learning disability that affects my ability to read and/or write.

_____ A. Yes, I am registered with the campus disability support office.

_____ B. Yes, I was diagnosed by a specialist but have not registered for services here.

_____ C. Yes, I believe so, but I have never been tested or diagnosed.

_____ D. No, I do not have a learning disability.

Please turn to the next page.

Section II--Instructor Comments

Category I: Comment Placement

12. On papers I wrote, instructors' comments were placed in the margins
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
13. On papers I wrote, instructors' comments were placed at the end of the paper
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
14. On papers I wrote, instructors' comments were placed close to where they referred to an issue in my writing
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
15. On papers I wrote, instructors' comments were placed on a separate piece of paper
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
16. On papers I wrote, instructors wrote comments
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

Category II: Comment Appearance

17. On papers I wrote, instructors' comments were written in black pen
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
18. On papers I wrote, instructors' comments were written in lead pencil
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
19. On papers I wrote, instructors' comments were written in red pen or pencil
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
20. On papers I wrote, instructors' comments were written in green pen or pencil
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
21. On papers I wrote, instructors' comments were written in purple pen or pencil
- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

Please turn to the next page.

22. On papers I wrote, instructors' comments were written in some other pen or pencil color

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

23. On papers I wrote, instructors' comments were written in a variety of pen or pencil colors

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

24. On papers I wrote, instructors' comments were typed on a separate piece of paper or delivered electronically

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

25. On papers I wrote, instructors' comments were written in uppercase letters

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

26. On papers I wrote, instructors' comments were written in lowercase letters

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

27. On papers I wrote, instructors' comments were written in mixed case letters, with uppercase first letters and lowercase remaining letters

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time

- ☐ D. occasionally
- ☐ E. never

28. On papers I wrote, instructors' comments were written in cursive handwriting

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

29. On papers I wrote, instructors' comments were hand printed

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

30. On papers I wrote, instructors' comments were underlined

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

31. On papers I wrote, instructors' comments were written in very light lettering

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

32. On papers I wrote, instructors' comments were written in very dark lettering

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

Please turn to the next page.

33. On papers I wrote, instructors' comments were legible and easy to decipher

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

34. On papers I wrote, instructors' comments were difficult to decipher

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

35. On papers I wrote, instructors' comments were illegible and nearly impossible to decipher

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

Category IV: Tone

36. On papers I wrote, I found comments that positively evaluated the quality of my work like "Good work" or "Well done"

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

37. On papers I wrote, I found comments that encouraged me to improve like "Good start, keep working" or "You have improved this"

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

38. On papers I wrote, I found negative comments like "This is very poorly written" or "Sloppy, careless work"

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

39. On papers I wrote, I found impartial comments that pointed out specific things to change like "You need a comma here" or "This should be explained more clearly"

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

40. On papers I wrote, I found hostile comments like "Why are you even in college?" or "You really do not belong in this program"

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

41. On papers I wrote, I found resigned comments like "I give up, but I'm giving you a passing grade anyway" or "You will never be a good writer"

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

42. On papers I wrote, I found comments that sounded like orders

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

Please turn to the next page.

43. On papers I wrote, I found comments that sounded like suggestions

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

44. On papers I wrote I found comments that sounded like instructions

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

45. On papers I wrote I found comments that sounded like questions

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

Category V: Completeness

46. On papers I wrote, I found instructor comments that used symbols like ¶, ||, √

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

47. If I found comments that used symbols, I understood what these symbols meant

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find symbols

48. If I found comments that used symbols, I knew what the instructor wanted me to do as a result of these symbols

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find symbols

49. On papers I wrote, I found comments that used abbreviations like, "frag." "tr." And "sp."

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

50. If I found comments that used abbreviations, I understood what these abbreviations meant

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find abbreviations

51. If I found comments that used abbreviations, I knew what the instructor wanted me to do as a result of these abbreviations

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find abbreviations

Please turn to the next page.

52. On papers I wrote, I found comments that used single words like “possessive,” “delete,” and “lowercase”

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

53. If I found comments that used single words, I understood what these words meant

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find single words

54. If I found comments that used single words, I knew what the instructor wanted me to do as a result of these words

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find single words

55. On papers I wrote, I found comments that used phrases like “subject/verb agreement” or “no quotation marks here”

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

56. If I found comments that used phrases, I understood what these phrases meant

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find phrases

57. If I found comments that used phrases, I knew what the instructor wanted me to do as a result of these phrases

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find phrases

58. On papers I wrote, I found comments that used complete sentences like “Try to organize your thoughts before you begin” or “This is not a proper noun”

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

59. If I found comments that used complete sentences, I knew what these sentences meant

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find complete sentences

60. If I found comments that used complete sentences, I knew what the instructor wanted me to do as a result of these sentences

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find complete sentences

Please turn to the next page.

61. On papers I wrote, I found comments that were written in the form of explanatory paragraphs

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never

62. If I found comments that used explanatory paragraphs, I understood these paragraphs

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find paragraphs

63. If I found explanatory paragraphs, I knew what the instructor wanted me to do as a result of these paragraphs

- ☐ A. all of the time
- ☐ B. most of the time
- ☐ C. some of the time
- ☐ D. occasionally
- ☐ E. never
- ☐ F. did not find paragraphs

Please turn to the next page.

Section III--Writing Apprehension Scale

Below is a series of statements about writing. There are no right or wrong answers to these statements. Please indicate the degree to which each statement applies to you by circling the number that shows whether you strongly agree, agree, are uncertain, disagree, or strongly disagree with the statement.

		Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. I avoid writing	+					
2. I have no fear of my writing being evaluated.	-					
3. I look forward to writing down my ideas.	-					
4. I am afraid of writing when I know it will be evaluated.	+					
5. Taking a writing course is a very frightening experience.	+					
6. Handing in a written piece makes me feel good.	-					
7. My mind seems to go blank when I start to work on my writing.	+					
8. Expressing ideas through writing seems to be a waste of time.	+					
9. I would enjoy submitting my writing to magazines for evaluation and publication.	-					
10. I like to write down my ideas.	-					
11. I feel confident in my ability to express my ideas clearly in writing.	-					
12. I like to have my friends read what I have written.	-					
13. I'm nervous about writing	+					
14. People seem to enjoy the things I write.	-					
15. I enjoy writing.	-					
16. I never seem to be able to write down my ideas clearly	+					
17. Writing is a lot of fun.	-					
18. I expect to do poorly in writing classes even before I enter them.	+					

19. I like seeing my thoughts on paper.	-					
20. Discussing my writing with others is an enjoyable experience.	-					
21. I have a terrible time organizing my ideas in a writing course.	+					
22. When I hand in a paper, I know I'm going to do poorly.	+					
23. It's easy for me to write a good paper.	-					
24. I don't think I write as well as most other people.	+					
25. I don't like my writing to be evaluated.	+					
26. I'm not good at writing.	+					

Scoring Procedures:

The response "strongly agree" has a value of one. If a student strongly agrees with statement 1, a positive statement, add one point to his or her score. The response "strongly disagree" has a value of five. If a student strongly disagrees with statement 2, a negative statement, subtract five points from his or her score. The other responses have the following values: agree, two; uncertain, three; disagree, four. If a student makes one of these responses, add or subtract the appropriate value. To determine whether to add or subtract, simply check the symbol opposite each statement. Writing Apprehension = $78 + \text{positive statement scores} - \text{negative statement scores}$. Scores may range from a low of 26 (a very apprehensive writer) to a high of 130 (an extremely confident writer).

Appendix C

Faculty Instructions for Freshman Composition Classes

First, let me thank those of you who responded and made suggestions for improvements in my questionnaire. Those suggestions were invaluable, and helped me and my committee to craft a much better questionnaire than I had initially drafted. Thank you.

If you recall from last spring, when I first asked for your participation, this research is for my dissertation. It focuses on the possible impact of various aspects of written comments from instructors on student papers—and the impact on writing apprehension, particularly. Just to review briefly, writing apprehension is the often-overwhelming anxiety some people feel when approaching a writing task—especially one which will be evaluated. This is foreign to me, since I love to write, but it is a topic I stumbled upon and found intriguing when I was working on my masters degree in teaching creative writing. People with high levels of writing apprehension do not write well. I will be looking at a number of aspects of teachers' written comments, including placement, appearance, tone, and completeness. The frequency with which students report different aspects of teacher comments will be statistically correlated with their results on a writing apprehension test that has been in use since 1975, and which has been widely validated.

There will be two parts to my research, and the portion dealing with freshmen enrolled in Composition I is the first part. These students will be responding based on

comments they received on papers while they were in high school, so no one needs to be concerned about negative responses to comments they may have made. Students who are freshmen haven't been in college enough to report on your commenting styles; however, it is important to administer this questionnaire during the first week of school, for uniformity of data.

The second part of the research will be done with seniors preparing graduate, who will be asked by their advisors to fill out the same questionnaire. Those students will be reporting on comments written by their college instructors, but only on an overall basis. The only information requested will deal with students' recollection of comments made by instructors. No one will be naming specific instructors or reading comments teachers have actually made, so no confidentiality will be violated in that way.

In order to make this process as easy as possible, I have made up a packet for each faculty member who has agreed to participate. These packets will be available in the department office early next week. Each packet contains the following materials:

- Thirty questionnaires: Since the students will be using scantron forms, and not writing on the questionnaires themselves, these can be re-used for all sections you teach. I am including more copies than you need, in case some students write on them anyway. I would like you to return the questionnaires when you have finished administering them, so I can use them again with the seniors.
- Scantron forms: These are a little different from the ones we are used to, because I needed more than five response options, which is the standard format. Students will NOT be filling out their name or any other identifying information, or writing comments on this first side of the scantron form, with the exception of

international students, who will be asked to note their home country and native language. In fact, when I administer the questionnaire to my own students, I will read the questions to them *before* I hand out the materials, because I don't want anyone to start filling out the scantron or the questionnaire before they know how to do so. They will only be using the back side, which has bubbles for answers but no spaces for other information.

- Consent forms: Each student is required by the DSU Institutional Review Board (IRB), which reviews any research using human subjects, to sign and date a consent form. They must turn that form in to you when they turn in their scantron form and questionnaire. Please try to make sure you get a consent form from each student. They are allowed, and even encouraged, to take a copy with them, which need not be signed, but which is purely for their information, should they have any questions or concerns later. The consent form includes contact information for me and for my two committee co-chairs. Students are not required to take one with them, but they are encouraged to do so.
- Pencils: Although many students have pencils, some do not, so I included a box of 24 (sharpened) pencils. Those that are left you may keep.
- Manilla envelopes, labeled "scantron" and "consent forms." It is important for students to know that consent forms will be kept separate from scantron response forms or data from those forms. In fact, I am required by federal law to keep the consent forms in one locked file cabinet and the scantron forms and other data in a separate locked file cabinet to protect confidentiality and the anonymity of the students' responses. To simplify matters, I have set it up so that they will

immediately placed into separate envelopes. As each of your classes completes the questionnaire, materials may be placed into these envelopes. They do not need to be separated by section. When you have finished with all of your sections, you may place the questionnaires back into the main packet. All of these materials may be dropped off with Melissa, the Language and Literature Department's secretary.

- Student instruction sheet: This is similar to the instruction sheet we used to receive when we did in-class student evaluations. You may read (or paraphrase) these instructions so the students know what to do. It is not intended to be distributed to students, only read to them.

These are all of the materials you will need. Our Computer Services Department will be processing the scantron forms. This is another reason students should NOT put their names on those forms—because someone besides the primary investigator (me) will be handling the scantron forms and we don't want any identifying information on them. They will be putting the data from all of these forms into Excel, and I will transfer those data from Excel into SPSS, the statistical program I will be using to analyze the data. Dr. Brauhn has asked for a summary report when this research is finished, so you will be hearing about my results.

When you are ready to administer the questionnaire, there are a few simple steps for you to take:

- Read or paraphrase the instructions for the students.
- Distribute all materials, including pencils if needed.

- Collect the completed scantron forms and place them in the scantron envelope.
- Collect the (hopefully) still-blank questionnaires.
- Deliver all materials to the Language and Literature Department's secretary where I will pick them up.

I cannot thank you enough for your help with this project. I believe the information will be valuable to teachers in all disciplines. Thank you!

Appendix D
Student Instruction Sheet for Freshman Composition Students

One of our instructors, Mrs. Hanna, is engaged in a research project with which she has asked your assistance. She is studying the impact of teacher comments. Please think carefully about the comments teachers wrote on your papers in high school, and answer the questions on this questionnaire based on your memories of those comments. Be careful not to contradict yourself. For example, if you say that you never received a certain type of comment, and then you say you always understood that type of comment, you have contradicted yourself, and your responses will be invalid. If you never received a particular type of comment, then in answer to a question about whether you understood, you should mark, "did not see. . . ."

This survey is completely confidential, and steps are taken to be sure your responses are anonymous. Your participation is voluntary, but we hope that you will be willing to spend 15-20 minutes filling this survey out so that teachers can learn better ways to comment on papers their students write. If you have any questions about the intent or results of this research, you may contact the people mentioned in the consent form. We do need a signed consent form from each person who completes the survey. You are also encouraged to take one copy of the consent for home in case you do have questions later on. Here is what we need you to do.

1. Sign one consent sheet and turn it in. You may keep one for your own information. This consent form, with your name on it, will be kept in a

locked file cabinet. Your responses and the data from those response forms will be kept in a separate, locked file cabinet so that your responses will be completely anonymous, and no one will be able to connect your responses to your name.

2. Do NOT write on the questionnaire itself. Responses should be entered on the scantron form. This is also true of the Writing Apprehension Scale portion of the questionnaire, which comes at the end. Those responses should also be entered on the scantron form, in the same way as the other responses, with “strongly agree” being recorded as “a”, “agree” as “b”, and so forth.
3. Do NOT enter your name or other identifying information on the scantron form, except for your major and your native language and home country, if you are an international student for whom English is a second language. Use only the side with the rows of bubbles for answering questions. This is also for the protection of your anonymity and confidentiality.
4. Please use a pencil. If you do not have a pencil, I will provide one.
5. Fill the bubbles completely. If bubbles are not completely filled, they may be recorded by the computer as un-answered. Do not leave any stray marks on the scantron form. They may be read as responses.
6. You are free to leave unanswered any question with which you are uncomfortable. However, every question is important, and the responses to all questions will be used in this or future research, so your decisions about whether or not to answer specific questions will have an impact.

7. When you have finished, please turn in the signed consent form, the scantron form, the questionnaire, and the pencil, if you borrowed one.
8. Thank you for participating in this research.

Appendix E

Faculty Instructions for Graduating Seniors

As you may know, this research is for my dissertation. It focuses on the possible impact of various aspects of written comments from instructors on student papers—and the impact on writing apprehension, particularly. Writing apprehension is the often-overwhelming anxiety some people feel when approaching a writing task—especially one which will be evaluated. This is foreign to me, since I love to write, but it is a topic I stumbled upon and found intriguing when I was working on my masters degree in teaching creative writing. People with high levels of writing apprehension do not write well. I will be looking at a number of aspects of teachers' written comments, including placement, appearance, tone, and completeness. The frequency with which students report different aspects of teacher comments will be statistically correlated with their results on a writing apprehension test that has been in use since 1975, and which has been widely validated.

There will be two parts to my research, and the first portion dealt with freshmen enrolled in Composition I. Those students responded based on comments they received on papers while they were in high school.

The second part of the research will be done with seniors preparing to graduate, who will be asked to fill out the same questionnaire as was filled out by the freshmen. Those students will be reporting on comments written by their college instructors, but only on an overall basis.

The only information requested will deal with students' recollection of comments made by instructors. No one will be naming specific instructors or reading comments teachers have actually made, so no confidentiality will be violated in that way.

In order to make this process as easy as possible, I have made up a packet for each faculty member who has agreed to participate. These packets will be available in the department office early next week. Each packet contains the following materials:

- Thirty questionnaires: Since the students will be using scantron forms, and not writing on the questionnaires themselves, these can be re-used for all sections you teach. I am including more copies than you need, in case some students write on them anyway. I would like you to return the questionnaires when you have finished administering them, so I can use them again with the seniors.
- Scantron forms: These are a little different from the ones we are used to, because I needed more than five response options, which is the standard format. Students will NOT be filling out their name or any other identifying information, or writing comments on this first side of the scantron form, with the exception of international students, who will be asked to note their home country and native language. In fact, when I administer the questionnaire to my own students, I will read the questions to them *before* I hand out the materials, because I don't want anyone to start filling out the scantron or the questionnaire before they know how to do so. They will only be using the back side, which has bubbles for answers but no spaces for other information.
- Consent forms: Each student is required by the DSU Institutional Review Board (IRB), which reviews any research using human subjects, to sign and date a

consent form. They must turn that form in to you when they turn in their scantron form and questionnaire. Please try to make sure you get a consent form from each student. They are allowed, and even encouraged, to take a copy with them, which need not be signed, but which is purely for their information, should they have any questions or concerns later. The consent form includes contact information for me and for my two committee co-chairs. Students are not required to take one with them, but they are encouraged to do so.

- Pencils: Although many students have pencils, some do not, so I included a box of 24 (sharpened) pencils. Those that are left you may keep.
- Manilla envelopes, labeled “scantron” and “consent forms.” It is important for students to know that consent forms will be kept separate from scantron response forms or data from those forms. In fact, I am required by federal law to keep the consent forms in one locked file cabinet and the scantron forms and other data in a separate locked file cabinet to protect confidentiality and the anonymity of the students’ responses. To simplify matters, I have set it up so that they will immediately placed into separate envelopes. As each of your classes completes the questionnaire, materials may be placed into these envelopes. They do not need to be separated by section. When you have finished with all of your sections, you may place the questionnaires back into the main packet. All of these materials may be dropped off with the Language and Literature Department’s secretary.
- Student instruction sheet: This is similar to the instruction sheet we used to receive when we did in-class student evaluations. You may read (or paraphrase)

these instructions so the students know what to do. It is not intended to be distributed to students, only read to them.

These are all of the materials you will need. Our Computer Services Department will be processing the scantron forms. This is another reason students should NOT put their names on those forms—because someone besides the primary investigator (me) will be handling the scantron forms and we don't want any identifying information on them. They will be putting the data from all of these forms into Excel, and I will transfer those data from Excel into SPSS, the statistical program I will be using to analyze the data. Dr. Brauhn has asked for a summary report when this research is finished, so you will be hearing about my results.

When you are ready to administer the questionnaire, there are a few simple steps for you to take:

- Read or paraphrase the instructions for the students.
- Distribute all materials, including pencils if needed.
- Collect the completed scantron forms and place them in the scantron envelope.
- Collect the (hopefully) still-blank questionnaires.
- Deliver all materials to Melissa where I will pick them up.

I cannot thank you enough for your help with this project. I believe the information will be valuable to teachers in all disciplines. Thank you!

Appendix F
Student Instruction Sheet for Graduating Seniors

One of our instructors, Mrs. Hanna, is engaged in a research project with which she has asked your assistance. She is studying the impact of teacher comments. Please think carefully about the comments teachers wrote on your papers in college, and answer the questions on this questionnaire based on your memories of those comments. Be careful not to contradict yourself. For example, if you say that you never received a certain type of comment, and then you say you always understood that type of comment, you have contradicted yourself, and your responses will be invalid. If you never received a particular type of comment, then in answer to a question about whether you understood, you should mark, "did not see. . . ."

This survey is completely confidential, and steps are taken to be sure your responses are anonymous. Your participation is voluntary, but we hope that you will be willing to spend 15-20 minutes filling this survey out so that teachers can learn better ways to comment on papers their students write. If you have any questions about the intent or results of this research, you may contact the people mentioned in the consent form. We do need a signed consent form from each person who completes the survey. You are also encouraged to take one copy of the consent for home in case you do have questions later on. Here is what we need you to do.

1. Sign one consent sheet and turn it in. You may keep one for your own information. This consent form, with your name on it, will be kept in a locked

2. file cabinet. Your responses and the data from those response forms will be kept in a separate, locked file cabinet so that your responses will be completely anonymous, and no one will be able to connect your responses to your name.
3. Do NOT write on the questionnaire itself. Responses should be entered on the scantron form. This is also true of the Writing Apprehension Scale portion of the questionnaire, which comes at the end. Those responses should also be entered on the scantron form, in the same way as the other responses, with “strongly agree” being recorded as “a”, “agree” as “b”, and so forth.
4. Do NOT enter your name or other identifying information on the scantron form, except for your major and your native language and home country, if you are an international student for whom English is a second language. Use only the side with the rows of bubbles for answering questions. This is also for the protection of your anonymity and confidentiality.
5. Please use a pencil. If you do not have a pencil, I will provide one.
6. Fill the bubbles completely. If bubbles are not completely filled, they may be recorded by the computer as un-answered. Do not leave any stray marks on the scantron form. They may be read as responses.
7. You are free to leave unanswered any question with which you are uncomfortable. However, every question is important, and the responses to all questions will be used in this or future research, so your decisions about whether or not to answer specific questions will have an impact.

8. When you have finished, please turn in the signed consent form, the scantron form, the questionnaire, and the pencil, if you borrowed one.
9. Thank you for participating in this research.

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